THE

WORKS

OF

FRANCIS BACON,

BARON OF VERULAM,

VISCOUNT ST. ALBAN,

AND

Lord High Chancellor of England.

NEW EDITION.

IN TEN VOLUMES.

VOL. II.

LONDON:

PRINTED FOR C. AND J. RIVINGTON; J. CUTHELL; T. EGERTON; J. NUNN; LONGMAN, HURST, AND CO.; T. CADELL; J. AND W. T. CLARKE; J. AND A. ARCH; J. RICHARDSON; J. M. RICHARDSON; JEFFERY AND SON; BAYNES AND SON; J. BOOKER; R. SCHOLEY; HATCHARD AND SON; S. BAGSTER; J. MAWMAN; BALDWIN AND CO.; J. BOOTH; J. BOHN; HAMILTON, ADAMS, AND CO.; W. STEWART; G. B. WHITTAKER; J. DUNCAN; HARDING, LEPARD, AND CO.; W. MASON; SAUNDERS AND HODGSON; J. DOWDING; R. MAYNARD; J. BRUMBY; J. COLLINGWOOD; AND C. WICKSTEED.

1826.

C. Baldwin, Printer,
New Bridge Street, London.

1153
1826
V.2

CONTENTS

OF THE

SECOND VOLUME.

CENTURY IX.

Page

Of perception in bodies insensible, tending to natural divination or subtile trials 1
Of the nature of appetite in the stomach 8
Of sweetness of odour from the rainbow 9
Of sweet smells 10
Of the corporeal substance of smells 10
Of fetid and fragrant odours 11
Of the causes of putrefaction 12
Of bodies unperfectly mixt 13
Of concoction and crudity 13
Of alterations, which may be called majors 15
Of bodies liquefiable, and not liquefiable 15
Of bodies fragile and tough 16
Of the two kinds of pneumaticals in bodies 17
Of concretion and dissolution of bodies 17
Of bodies hard and soft 18
Of ductile and tensile 18
Of several passions of matter, and characters of bodies 19
Of induration by sympathy 20
Of honey and sugar 20
Of the finer sort of base metals 21
Of certain cements and quarries 21
Of the altering of colours in hairs and feathers 21
Of the difference of living creatures, male and female 22
Of the comparative magnitude of living creatures 23
Of producing fruit without core or stone 24
Of the melioration of tobacco 24
Of several heats working the same effects 25
Of swelling and dilatation in boiling 25

420871

Page
Of the dulcoration of fruits 25
Of flesh edible and not edible..... 26
Of the salamander 27
Of the contrary operations of time on fruits and liquors 27
Of blows and bruises 28
Of the orrice root 28
Of the compression of liquors..... 28
Of the working of water upon air contiguous 29
Of the nature of air 29
Of the eyes and sight..... 29
Of the colour of the sea, or other water 32
Of shell-fish 32
Of the right side, and the left 32
Of frictions..... 33
Of globes appearing flat at distance 33
Of shadows..... 33
Of the rolling and breaking of the seas 34
Of the dulcoration of salt water..... 34
Of the return of saltness in pits upon the sea-shore 34
Of attraction by similitude of substance..... 35
Of attraction 35
Of heat under earth 35
Of flying in the air 35
Of the scarlet dye 36
Of maleficiating..... 36
Of the rise of water by means of flame..... 36
Of the influences of the moon..... 37
Of vinegar 39
Of creatures that sleep all winter 40
Of the generating of creatures by copulation, and by putrefaction..... 40

CENTURY X.

Of the transmission and influx of immateriate virtues, and the force of imagination..... 42
Of the emission of spirits in vapour, or exhalation, odour-like 48
Of emission, of spiritual species which affect the senses..... 53
Of emissions of immateriate virtues, from the minds and spirits of men, by affections, imagination, or other impressions 54

Page
Of the secret virtue of sympathy and antipathy 63
Of secret virtues and proprieties 74
Of the general sympathy of mens spirits 75
New Atlantis 79
Mr. Bacon in praise of knowledge 118
"Valerius Terminus" of the interpretation of nature: a few fragments of the first book 122
Filum Labyrinthi, sive formula Inquisitionis 161
Sequela chartarum, sive inquisitio legitima de calore et frigore 173

PHYSIOLOGICAL REMAINS.

Inquisitions touching the compounding of metals 187
Questions touching minerals, with Dr. Meverel's solutions .. 187
Of the compounding, incorporating, or union of metals or minerals 187
Compound metals now in use 191
Of the separation of metals and minerals 192
Of the variation of metals into several shapes, bodies, or natures 194
Of the restitution of metals and minerals 198
Inquisition concerning the versions, transmutations, multiplications, and affections of bodies 199
A speech concerning the recovering of drowned mineral works 200
Experiments about weight in air and water 202
Certain sudden thoughts of the lord Bacon, set down by him under the title of Experiments for Profit 204
Experiments about the commixture of liquors only, not solids, without heat or agitation, but only by simple composition and settling 205
A catalogue of bodies, attractive and not attractive, together with experimental observations about attraction 208

MEDICAL REMAINS.

Grains of youth 209
Preserving ointments 209
A purge familiar for opening the liver 209

Page
Wine for the spirits 209
The preparing of saffron 210
Wine against adverse melancholy, preserving the senses and the reason 210
Breakfast preservative against the gout and rheums 210
The preparation of garlick 210
The artificial preparation of damask roses for smell 210
A restorative drink 210
Against the waste of the body by heat 211
Methusalem water: Against all asperity and torrefaction of inward parts, and all adustion of the blood, and generally against the dryness of age 211
A catalogue of astringents, openers, and cordials 212
An extract by the lord Bacon, for his own use, out of the book of the prolongation of life, together with some new advices in order to health 214

MEDICAL RECEIPTS.

His lordship's usual receipt for the gout 217
His lordship's broth and fomentation for the stone 217
A manus Christi for the stomach 219
A secret for the stomach 219

WORKS MORAL.

A fragment of the colours of good and evil 221

ESSAYS OR COUNSELS CIVIL AND MORAL.

1. Of truth 245
2. Of death 247
3. Of unity in religion 248
4. Of revenge 252
5. Of adversity 254
6. Of simulation and dissimulation 255
7. Of parents and children 257
8. Of marriage and single life 259
9. Of envy 260
10. Of love 265
11. Of great place 266

Page
12. Of boldness 269
13. Of goodness, and goodness of nature 271
14. Of nobility 273
15. Of seditions and troubles 274
16. Of atheism 280
17. Of superstition 283
18. Of travel 284
19. Of empire 286
20. Of counsel 290
21. Of delays 295
22. Of cunning 295
23. Of wisdom for a man's self 299
24. Of innovations 300
25. Of dispatch 301
26. Of seeming wise 303
27. Of friendship 304
28. Of expence 310
29. Of the true greatness of kingdoms and estates 311
30. Of regimen of health 320
31. Of suspicion 321
32. Of discourse 322
33. Of plantations 324
34. Of riches 326
35. Of prophecies 329
36. Of ambition 332
37. Of masques and triumphs 334
38. Of nature in men 335
39. Of custom and education 337
40. Of fortune 338
41. Of usury 340
42. Of youth and age 343
43. Of beauty 345
44. Of deformity 346
45. Of building 347
46. Of gardens 351
47. Of negotiating 356
48. Of followers and friends 358
49. Of suitors 359
50. Of studies 361
51. Of faction 362
52. Of ceremonies and respects 364

Page
53. Of praise 365
54. Of vain-glory 366
55. Of honour and reputation 368
56. Of judicature 369
57. Of anger 373
58. Of vicissitude of things 275
Of a king 380
A fragment of an essay on fame 382

A collection of Apophthegms, new and old 387
Ornamenta rationalia 447
Short notes for civil conversation 455
An essay on death 456

THEOLOGICAL WORKS.

A confession of faith 465
A prayer or psalm 473
A prayer 474
The student's prayer 477
The writer's prayer 477
The characters of a believing Christian, in paradoxes, and seeming contradictions 478
An advertisement touching the controversies of the Church of England 483
Certain considerations touching the better pacification and edification of the Church of England 507
Circumstances in the government of bishops 513
Concerning the liturgy, the ceremonies and subscription 519
Touching a preaching ministry 524
Touching the abuse of excommunication 527
Touching non-residents and pluralities 528
Touching the provision for sufficient maintenance in the church 530
The translation of certain psalms into English verse.
Psalm I. 535
Psalm XII. 536
Psalm XC. 537
Psalm CIV. 539
Psalm CXXVI. 542
Psalm CXXXV. 543
Psalm CXLIX. 544

NATURAL HISTORY.

CENTURY IX.

Experiments in consort touching perception in bodies insensible, tending to natural divination or subtile trials.

It is certain, that all bodies whatsoever, though they have no sense, yet they have perception: for when one body is applied to another, there is a kind of election to embrace that which is agreeable, and to exclude or expel that which is ingrate: and whether the body be alterant, or altered, evermore a perception precedeth operation; for else all bodies would be alike one to another. And sometimes this perception, in some kind of bodies, is far more subtile than the sense; so that the sense is but a dull thing in comparison of it: we see a weather-glass will find the least difference of the weather, in heat, or cold, when men find it not. And this perception also is sometimes at distance, as well as upon the touch; as when the loadstone draweth iron, or flame fireth naphtha of Babylon, a great distance off. It is therefore a subject of a very noble inquiry, to inquire of the more subtile perceptions; for it is another key to open nature, as well as the sense, and sometimes better. And besides, it is a principal means of natural divination; for that which in these perceptions appeareth early, in the great effects cometh long after. It is true also, that it serveth to discover that which is hid, as well as to foretel that which is to come, as it is in many subtile trials; as to try whether seeds be old or new, the sense cannot inform; but if you boil them in water, the new seeds will sprout sooner: and so of water, the taste will not discover the best water; but the speedy consuming of it, and many other means, which we have heretofore set down, will discover it. So in all physiognomy, the lineaments of

the body will discover those natural inclinations of the mind which dissimulation will conceal, or discipline will suppress. We shall therefore now handle only those two perceptions, which pertain to natural divination and discovery; leaving the handling of perception in other things to be disposed elsewhere. Now it is true, that divination is attained by other means; as if you know the causes, if you know the concomitants, you may judge of the effect to follow; and the like may be said of discovery; but we tie ourselves here to that divination and discovery chiefly, which is caused by an early or subtile perception.

The aptness or propension of air, or water, to corrupt or putrify, no doubt, is to be found before it break forth into manifest effects of diseases, blastings, or the like. We will therefore set down some prognostics of pestilential and unwholesome years.

801. The wind blowing much from the south without rain, and worms in the oak-apple, have been spoken of before. Also the plenty of frogs, grasshoppers, flies, and the like creatures bred of putrefaction, doth portend pestilential years.

802. Great and early heats in the spring, and namely in May, without winds, portend the same; and generally so do years with little wind or thunder.

803. Great droughts in summer lasting till towards the end of August, and some gentle showers upon them, and then some dry weather again, do portend a pestilent summer the year following: for about the end of August all the sweetness of the earth, which goeth into plants and trees, is exhaled, and much more if the August be dry, so that nothing then can breathe forth of the earth but a gross vapour, which is apt to corrupt the air: and that vapour, by the first showers, if they be gentle, is released, and cometh forth abundantly. Therefore they that come abroad soon after those showers, are commonly taken with sickness: and in Africa, nobody will stir out of doors after the first showers. But if the showers come vehemently, then they rather wash and fill the earth, than give it leave to breathe forth presently. But if dry weather

come again, then it fixeth and continueth the corruption of the air, upon the first showers begun; and maketh it of ill influence, even to the next summer; except a very frosty winter discharge it, which seldom succeedeth such droughts.

804. The lesser infections, of the small-pox, purple fevers, agues, in the summer precedent, and hovering all winter, do portend a great pestilence in the summer following: for putrefaction doth not rise to its height at once.

805. It were good to lay a piece of raw flesh or fish in the open air; and if it putrify quickly, it is a sign of a disposition in the air to putrefaction. And because you cannot be informed whether the putrefaction be quick or late, except you compare this experiment with the like experiment in another year, it were not amiss in the same year, and at the same time, to lay one piece of flesh or fish in the open air, and another of the same kind and bigness within doors: for I judge, that if a general disposition be in the air to putrify, the flesh, or fish, will sooner putrify abroad where the air hath more power, than in the house, where it hath less, being many ways corrected. And this experiment would be made about the end of March: for that season is likeliest to discover what the winter hath done, and what the summer following will do, upon the air. And because the air, no doubt, receiveth great tincture and infusion from the earth; it were good to try that exposing of flesh or fish, both upon a stake of wood some height above the earth, and upon the flat of the earth.

806. Take May-dew, and see whether it putrify quickly or no; for that likewise may disclose the quality of the air, and vapour of the earth, more or less corrupted.

807. A dry March, and a dry May, portend a wholesome summer, if there be a showering April between: but otherwise it is a sign of a pestilential year.

808. As the discovery of the disposition of the air is good for the prognostics of wholesome and unwholesome years; so it is of much more use, for the choice

of places to dwell in: at the least, for lodges, and retiring places for health: for mansion-houses respect provisions as well as health, wherein the experiments above-mentioned may serve.

809. But for the choice of places, or seats, it is good to make trial, not only of aptness of air to corrupt, but also of the moisture and dryness of the air, and the temper of it in heat or cold; for that may concern health diversly. We see that there be some houses, wherein sweet-meats will relent, and baked meats will mould, more than in others; and wainscots will also sweat more; so that they will almost run with water; all which, no doubt, are caused chiefly by the moistness of the air in those seats. But because it is better to know it before a man buildeth his house, than to find it after, take the experiments following.

810. Lay wool, or a sponge, or bread, in the place you would try, comparing it with some other places; and see whether it doth not moisten, and make the wool, or sponge, etc. more ponderous than the other: and if it do, you may judge of that place, as situate in a gross and moist air.

811. Because it is certain, that in some places, either by the nature of the earth, or by the situation of woods and hills, the air is more unequal than in others; and inequality of air is ever an enemy to health; it were good to take two weather-glasses, matches in all things, and to set them, for the same hours of one day, in several places, where no shade is, nor inclosures; and to mark when you set them, how far the water cometh; and to compare them, when you come again, how the water standeth then; and if you find them unequal, you may be sure that the place where the water is lowest is in the warmer air, and the other in the colder. And the greater the inequality be, of the ascent or descent of the water, the greater is the inequality of the temper of the air.

812. The predictions likewise of cold and long winters, and hot and dry summers, are good to be known; as well for the discovery of the causes, as for

divers provisions. That of plenty of haws, and hips, and brier-berries, hath been spoken of before. If wainscot, or stone, that have used to sweat, be more dry in the beginning of winter, or the drops of the eaves of houses come more slowly down than they use, it portendeth a hard and frosty winter. The cause is, for that it sheweth an inclination of the air to dry weather; which in winter is ever joined with frost.

813. Generally a moist and cool summer portendeth a hard winter. The cause is, for that the vapours of the earth are not dissipated in the summer by the sun; and so they rebound upon the winter.

814. A hot and dry summer, and autumn, and especially if the heat and drought extend far into September, portendeth an open beginning of winter; and colds to succeed toward the latter part of the winter, and the beginning of the spring: for till then the former heat and drought bear the sway, and the vapours are not sufficiently multiplied.

815. An open and warm winter portendeth a hot and dry summer; for the vapours disperse into the winter showers; whereas cold and frost keepeth them in, and transporteth them into the late spring and summer following.

816. Birds that use to change countries at certain seasons, if they come earlier, do shew the temperature of weather, according to that country whence they came: as the winter birds, namely, woodcocks, feldfares, etc. if they come earlier, and out of the northern countries, with us shew cold winters. And if it be in the same country, then they shew a temperature of season, like unto that season in which they come: as swallows, bats, cuckooes, etc. that come towards summer, if they come early, shew a hot summer to follow.

817. The prognostics, more immediate, of weather to follow soon after, are more certain than those of seasons. The resounding of the sea upon the shore; and the murmur of winds in the woods, without apparent wind, shew wind to follow; for such winds breathing chiefly out of the earth, are not at the first per-

ceived, except they be pent by water or wood. And therefore a murmur out of caves likewise portendeth as much.

818. The upper regions of the air perceive the collection of the matter of tempests and winds, before the air here below: and therefore the obscuring of the smaller stars, is a sign of tempest following. And of this kind you shall find a number of instances in our inquisition "De Ventis."

819. Great mountains have a perception of the disposition of the air to tempests, sooner than the valleys or plains below: and therefore they say in Wales, when certain hills have their night-caps on, they mean mischief. The cause is, for that tempests, which are for the most part bred above in the middle region, as they call it, are soonest perceived to collect in the places next it.

820. The air, and fire, have subtile perceptions of wind rising, before men find it. We see the trembling of a candle will discover a wind that otherwise we do not feel; and the flexuous burning of flames doth shew the air beginneth to be unquiet; and so do coals of fire by casting off the ashes more than they use. The cause is, for that no wind at the first, till it hath struck and driven the air, is apparent to the sense; but flame is easier to move than air: and for the ashes, it is no marvel, though wind unperceived shake them off; for we usually try which way the wind bloweth, by casting up grass, or chaff, or such light things into the air.

821. When wind expireth from under the sea, as it causeth some resounding of the water, whereof we spake before, so it causeth some light motions of bubbles, and white circles of froth. The cause is, for that the wind cannot be perceived by the sense, until there be an eruption of a great quantity from under the water; and so it getteth into a body: whereas in the first putting up it cometh in little portions.

822. We spake of the ashes that coals cast off; and of grass and chaff carried by the wind; so any light thing that moveth, when we find no wind, sheweth a

wind at hand; as when feathers, or down of thistles, fly to and fro in the air.

For prognostics of weather from living creatures, it is to be noted, that creatures that live in the open air, *sub dio*, must needs have a quicker impression from the air, than men that live most within doors; and especially birds who live in the air freest and clearest; and are aptest by their voice to tell tales what they find; and likewise by the motion of their flight to express the same.

823. Water-fowls, as sea-gulls, moor-hens, etc. when they flock and fly together from the sea towards the shores; and contrariwise, land-birds, as crows, swallows, etc. when they fly from the land to the waters, and beat the waters with their wings, do foreshew rain and wind. The cause is, pleasure that both kinds take in the moistness and density of the air; and so desire to be in motion, and upon the wing, whithersoever they would otherwise go: for it is no marvel, that water-fowl do joy most in that air which is likest water; and land-birds also, many of them, delight in bathing, and moist air. For the same reason also, many birds do prune their feathers; and geese do gaggle; and crows seem to call upon rain: all which is but the comfort they seem to receive in the relenting of the air.

324. The heron, when she soareth high, so as sometimes she is seen to pass over a cloud, sheweth winds: but kites flying aloft shew fair and dry weather. The cause may be, for that they both mount most into the air of that temper wherein they delight: and the heron being a water-fowl, taketh pleasure in the air that is condensed; and besides, being but heavy of wing, needeth the help of the grosser air. But the kite affecteth not so much the grossness of the air, as the cold and freshness thereof; for being a bird of prey, and therefore hot, she delighteth in the fresh air; and, many times, flyeth against the wind; as trouts and salmons swim against the stream. And yet it is true also, that all birds find an ease in the depth of the air; as swimmers do in a deep water.

And therefore when they are aloft, they can uphold themselves with their wings spread, scarce moving them.

825. Fishes, when they play towards the top of the water, do commonly foretel rain. The cause is, for that a fish hating the dry, will not approach the air till it groweth moist; and when it is dry, will fly it, and swim lower.

826. Beasts do take comfort generally in a moist air: and it maketh them eat their meat better; and therefore sheep will get up betimes in the morning to feed against rain: and cattle, and deer, and conies, will feed hard before rain; and a heifer will put up her nose, and snuff in the air against rain.

827. The trefoil against rain swelleth in the stalk; and so standeth more upright; for by wet, stalks do erect, and leaves bow down. There is a small red flower in the stubble-fields, which country people call the wincopipe; which if it open in the morning, you may be sure of a fair day to follow.

828. Even in men, aches, and hurts, and corns, do engrieve either towards rain, or towards frost: for the one maketh the humours more to abound; and the other maketh them sharper. So we see both extremes bring the gout.

829. Worms, vermin, etc. do foreshew likewise rain: for earth-worms will come forth, and moles will cast up more, and fleas bite more, against rain.

830. Solid bodies likewise foreshew rain. As stones and wainscot, when they sweat: and boxes and pegs of wood, when they draw and wind hard; though the former be but from an outward cause; for that the stone, or wainscot, turneth and beateth back the air against itself; but the latter is an inward swelling of the body of the wood itself.

Experiment solitary touching the nature of appetite in the stomach.

831. Appetite is moved chiefly by things that are cold and dry; the cause is, for that cold is a kind of indigence of nature, and calleth upon supply; and so

is dryness: and therefore all sour things, as vinegar, juice of lemons, oil of vitriol, etc. provoke appetite. And the disease which they call *appetitus caninus*, consisteth in the matter of an acid and glassy phlegm in the mouth of the stomach. Appetite is also moved by sour things; for that sour things induce a contraction in the nerves placed in the mouth of the stomach, which is a great cause of appetite. As for the cause why onions, and salt, and pepper, in baked meats, move appetite, it is by vellication of those nerves; for motion whetteth. As for wormwood, olives, capers, and others of that kind, which participate of bitterness, they move appetite by abstersion. So as there be four principal causes of appetite; the refrigeration of the stomach joined with some dryness, contraction, vellication, and abstersion; besides hunger: which is an emptiness: and yet over-fasting doth, many times, cause the appetite to cease; for that want of meat maketh the stomach draw humours, and such humours as are light and choleric, which quench appetite most.

Experiment solitary touching sweetness of odour from the rainbow.

832. It hath been observed by the ancients, that where a rainbow seemeth to hang over, or to touch, there breatheth forth a sweet smell. The cause is, for that this happeneth but in certain matters, which have in themselves some sweetness; which the gentle dew of the rainbow doth draw forth: and the like do soft showers; for they also make the ground sweet: but none are so delicate as the dew of the rainbow where it falleth. It may be also that the water itself hath some sweetness; for the rainbow consisteth of a glomeration of small drops, which cannot possibly fall but from the air that is very low; and therefore may hold the very sweetness of the herbs and flowers, as a distilled water; for rain, and other dew, that fall from high, cannot preserve the smell, being dissipated in the drawing up: neither do we know, whether some water itself may not have

some degree of sweetness. It is true, that we find it sensibly in no pool, river, nor fountain; but good earth newly turned up, hath a freshness and good scent; which water, if it be not too equal, for equal objects never move the sense, may also have. Certain it is, that bay-salt, which is but a kind of water congealed, will sometimes smell like violets.

Experiment solitary touching sweet smells.

833. To sweet smells heat is requisite to concoct the matter; and some moisture to spread the breath of them. For heat, we see that woods and spices are more odorate in the hot countries than in the cold: for moisture, we see that things too much dried lose their sweetness: and flowers growing, smell better in a morning or evening than at noon. Some sweet smells are destroyed by approach to the fire; as violets, wall-flowers, gilly-flowers, pinks; and generally all flowers that have cool and delicate spirits. Some continue both on the fire, and from the fire; as rose-water, etc. Some do scarce come forth, or at least not so pleasantly, as by means of the fire; as juniper, sweet gums, etc. and all smells that are enclosed in a fast body: but generally those smells are the most grateful, where the degree of heat is small; or where the strength of the smell is allayed; for these things do rather woo the sense, than satiate it. And therefore the smell of violets and roses exceedeth in sweetness that of spices and gums; and the strongest sort of smells are best in a weft afar off.

Experiment solitary touching the corporeal substance of smells.

834. It is certain, that no smell issueth but with emission of some corporeal substance; not as it is in light, and colours, and in sounds. For we see plainly, that smell doth spread nothing that distance that the other do. It is true, that some woods of oranges, and heaths of rosemary, will smell a great way into the sea, perhaps twenty miles; but what is that, since a peal of ordnance will do as much, which moveth

in a small compass? Whereas those woods and heaths are of vast spaces; besides, we see that smells do adhere to hard bodies; as in perfuming of gloves, etc. which sheweth them corporeal; and do last a great while, which sounds and light do not.

Experiment solitary touching fetid and fragrant odours.

835. The excrements of most creatures smell ill; chiefly to the same creature that voideth them: for we see, besides that of man, that pigeons and horses thrive best, if their houses and stables be kept sweet; and so of cage-birds: and the cat burieth that which she voideth: and it holdeth chiefly in those beasts which feed upon flesh. Dogs almost only of beasts delight in fetid odours; which sheweth there is somewhat in their sense of smell differing from the smells of other beasts. But the cause why excrements smell ill, is manifest; for that the body itself rejecteth them; much more the spirits: and we see that those excrements that are of the first digestion, smell the worst; as the excrements from the belly; those that are from the second digestion, less ill; as urine; and those that are from the third, yet less; for sweat is not so bad as the other two; especially of some persons, that are full of heat. Likewise most putrefactions are of an odious smell: for they smell either fetid or mouldy. The cause may be, for that putrefaction doth bring forth such a consistence, as is most contrary to the consistence of the body whilst it is sound: for it is a mere dissolution of that form. Besides, there is another reason, which is profound: and it is, that the objects that please any of the senses have all some equality, and, as it were, order in their composition; but where those are wanting, the object is ever ingrate. So mixture of many disagreeing colours is ever unpleasant to the eye: mixture of discordant sounds is unpleasant to the ear: mixture, or hotch-potch of many tastes, is unpleasant to the taste: harshness and ruggedness of bodies is unpleasant to the touch: now it is certain, that all putrefaction, being a dissolution of the first form, is a mere confusion and

unformed mixture of the part. Nevertheless it is strange, and seemeth to cross the former observation, that some putrefactions and excrements do yield excellent odours, as civet and musk; and, as some think, ambergrease: for divers take it, though improbably, to come from the sperm of a fish: and the moss we spake of from apple-trees, is little better than an excretion. The reason may be, for that there passeth in the excrements, and remaineth in the putrefactions, some good spirits; especially where they proceed from creatures that are very hot. But it may be also joined with a further cause, which is more subtile; and it is, that the senses love not to be over-pleased, but to have a commixture of somewhat that is in itself ingrate. Certainly, we see how discords in music, falling upon concords, make the sweetest strains: and we see again, what strange tastes delight the taste; as red herrings, caviary, parmesan, etc. And it may be the same holdeth in smells: for those kind of smells that we have mentioned, are all strong, and do pull and vellicate the sense. And we find also, that places where men urine, commonly have some smell of violets: and urine, if one hath eaten nutmeg, hath so too.

The slothful, general, and indefinite contemplations, and notions, of the elements and their conjugations; of the influences of heaven; of heat, cold, moisture, drought, qualities active, passive, and the like; have swallowed up the true passages, and processes, and affects, and consistences of matter and natural bodies. Therefore they are to be set aside, being but notional and ill limited; and definite axioms are to be drawn out of measured instances: and so assent to be made to the more general axioms by scale. And of these kinds of processes of natures and characters of matter, we will now set down some instances.

Experiment solitary touching the causes of putrefaction.

836. All putrefactions come chiefly from the inward spirits of the body; and partly also from the am-

bient body, be it air, liquor, or whatsoever else. And this last, by two means: either by ingress of the substance of the ambient body into the body putrified; or by excitation and solicitation of the body putrified, and the parts thereof, by the body ambient. As for the received opinion, that putrefaction is caused, either by cold, or peregrine and preternatural heat, it is but nugation: for cold in things inanimate, is the greatest enemy that is to putrefaction; though it extinguisheth vivification, which ever consisteth in spirits attenuate, which the cold doth congeal and coagulate. And as for the peregrine heat, it is thus far true, that if the proportion of the adventive heat be greatly predominant to the natural heat and spirits of the body, it tendeth to dissolution, or notable alteration. But this is wrought by emission, or suppression, or suffocation, of the native spirits; and also by the disordination and discomposure of the tangible parts, and other passages of nature, and not by a conflict of heats.

Experiment solitary touching bodies unperfectly mixed.

837. In versions, or main alterations of bodies, there is a medium between the body, as it is at first, and the body resulting; which medium is *corpus imperfecte mistum*, and is transitory, and not durable; as mists, smokes, vapours, *chylus* in the stomach, living creatures in the first vivification: and the middle action, which produceth such imperfect bodies, is fitly called, by some of the ancients, inquination, or inconcoction, which is a kind of putrefaction: for the parts are in confusion, till they settle one way or other.

Experiment solitary touching concoction and crudity.

838. The word concoction, or digestion, is chiefly taken into use from living creatures and their organs; and from thence extended to liquors and fruits, etc. Therefore they speak of meat concocted; urine and excrements concocted; and the four digestions, in the stomach, in the liver, in the arteries and nerves,

and in the several parts of the body, are likewise called concoctions: and they are all made to be the works of heat; all which notions are but ignorant catches of a few things, which are most obvious to mens observations. The constantest notion of concoction is, that it should signify the degrees of alteration, of one body into another, from crudity to perfect concoction; which is the ultimity of that action or process; and while the body to be converted and altered is too strong for the efficient that should convert or alter it, whereby it resisteth and holdeth fast in some degree the first form or consistence, it is all that while crude and inconcoct: and the process is to be called crudity and inconcoction. It is true, that concoction is in great part the work of heat, but not the work of heat alone: for all things that further the conversion, or alteration, as rest, mixture of a body already concocted, etc. are also means to concoction. And there are of concoction two periods; the one assimilation, or absolute conversion and sub-action; the other maturation; whereof the former is most conspicuous in the bodies of living creatures; in which there is an absolute conversion and assimilation of the nourishment into the body: and likewise in the bodies of plants: and again in metals, where there is a full transmutation. The other, which is maturation, is seen in liquors and fruits: wherein there is not desired, nor pretended, an utter conversion, but only an alteration to that form which is most sought for man's use; as in clarifying of drinks, ripening of fruits, etc. But note, that there be two kinds of absolute conversions; the one is, when a body is converted into another body, which was before; as when nourishment is turned into flesh; that is it which we call assimilation. The other is, when the conversion is into a body merely new, and which was not before; as if silver should be turned to gold, or iron to copper: and this conversion is better called, for distinction sake, transmutation.

Experiment solitary touching alterations, which may be called majors.

839. There are also divers other great alterations of matter and bodies, besides those that tend to concoction and maturation; for whatsoever doth so alter a body, as it returneth not again to that it was, may be called *alteratio major;* as when meat is boiled, or roasted, or fried, etc. or when bread and meat are baked; or when cheese is made of curds, or butter of cream, or coals of wood, or bricks of earth; and a number of others. But to apply notions philosophical to plebeian terms; or to say, where the notions cannot fitly be reconciled, that there wanteth a term or nomenclature for it, as the ancients used, they be but shifts of ignorance; for knowledge will be ever a wandering and indigested thing, if it be but a commixture of a few notions that are at hand and occur, and not excited from sufficient number of instances, and those well collated.

The consistences of bodies are very diverse: dense, rare; tangible, pneumatical; volatile, fixed; determinate, not determinate; hard, soft; cleaving, not cleaving; congelable, not congelable; liquefiable, not liquefiable; fragile, tough; flexible, inflexible, tractile, or to be drawn forth in length, intractile; porous, solid; equal and smooth, unequal; venous and fibrous, and with grains, entire; and divers others; all which to refer to heat, and cold, and moisture, and drought, is a compendious and inutile speculation. But of these see principally our "Abecedarium Naturæ;" and otherwise *sparsim* in this our "Sylva Sylvarum:" nevertheless, in some good part, we shall handle divers of them now presently.

Experiment solitary touching bodies liquefiable, and not liquefiable.

840. Liquefiable, and not liquefiable, proceed from these causes: liquefaction is ever caused by the detention of the spirits, which play within the body and open it. Therefore such bodies as are more tur-

gid of spirit; or that have their spirits more straitly imprisoned; or, again, that hold them better pleased and content, are liquefiable: for these three dispositions of bodies do arrest the emission of the spirits. An example of the first two properties is in metals; and of the last in grease, pitch, sulphur, butter, wax, etc. The disposition not to liquefy proceedeth from the easy emission of the spirits, whereby the grosser parts contract; and therefore bodies jejune of spirits, or which part with their spirits more willingly, are not liquefiable; as wood, clay, free-stone, etc. But yet even many of those bodies that will not melt, or will hardly melt, will notwithstanding soften; as iron, in the forge; and a stick bathed in hot ashes, which thereby becometh more flexible. Moreover there are some bodies which do liquefy or dissolve by fire: as metals, wax, etc. and other bodies which dissolve in water; as salt, sugar, etc. The cause of the former proceedeth from the dilatation of the spirits by heat: the cause of the latter proceedeth from the opening of the tangible parts, which desire to receive the liquor. Again, there are some bodies that dissolve with both; as gum, etc. And those be such bodies, as on the one side have good store of spirit; and on the other side, have the tangible parts indigent of moisture; for the former helpeth to the dilating of the spirits by the fire; and the latter stimulateth the parts to receive the liquor.

Experiment solitary touching bodies fragile and tough.

841. Of bodies, some are fragile; and some are tough, and not fragile; and in the breaking, some fragile bodies break but where the force is; some shatter and fly in many places. Of fragility, the cause is an impotency to be extended; and therefore stone is more fragile than metal; and so fictile earth is more fragile than crude earth; and dry wood than green. And the cause of this unaptness to extension, is the small quantity of spirits; for it is the spirit that furthereth the extension or dilatation of bodies; and it is ever concomitant with porosity, and with dryness in

the tangible parts: contrariwise, tough bodies have more spirit, and fewer pores, and moister tangible parts: therefore we see that parchment or leather will stretch, paper will not; woollen cloth will tenter, linen scarcely.

Experiment solitary touching the two kinds of pneumaticals in bodies.

842. All solid bodies consist of parts of two several natures, pneumatical and tangible; and it is well to be noted, that the pneumatical substance is in some bodies the native spirit of the body, and in some other, plain air that is gotten in; as in bodies desiccate by heat or age: for in them, when the native spirit goeth forth, and the moisture with it, the air with time getteth into the pores. And those bodies are ever the more fragile; for the native spirit is more yielding and extensive, especially to follow the parts, than air. The native spirits also admit great diversity; as hot, cold, active, dull, etc. whence proceed most of the virtues and qualities, as we call them, of bodies: but the air intermixed is without virtues, and maketh things insipid, and without any exstimulation.

Experiment solitary touching concretion and dissolution of bodies.

843. The concretion of bodies is commonly solved by the contrary; as ice, which is congealed by cold, is dissolved by heat; salt and sugar, which are excocted by heat, are dissolved by cold and moisture. The cause is, for that these operations are rather returns to their former nature, than alterations; so that the contrary cureth. As for oil, it doth neither easily congeal with cold, nor thicken with heat. The cause of both effects, though they be produced by contrary efficients, seemeth to be the same; and that is, because the spirit of the oil by either means exhaleth little, for the cold keepeth it in; and the heat, except it be vehement, doth not call it forth. As for cold, though it take hold of the tangible parts, yet as to the spirits, it doth rather make them swell than congeal them: as when ice is congealed

in a cup, the ice will swell instead of contracting, and sometimes rift.

Experiment solitary touching hard and soft bodies.

844. Of bodies, some we see are hard, and some soft: the hardness is caused chiefly by the jejuneness of the spirits, and their imparity with the tangible parts: both which, if they be in a greater degree, make them not only hard, but fragile, and less enduring of pressure; as steel, stone, glass, dry wood, etc. Softness cometh, contrariwise, by the greater quantity of spirits, which ever helpeth to induce yielding and cession, and by the more equal spreading of the tangible parts, which thereby are more sliding and following: as in gold, lead, wax, etc. But note, that soft bodies, as we use the word, are of two kinds; the one, that easily giveth place to another body, but altereth not bulk, by rising in other places: and therefore we see that wax, if you put any thing into it, doth not rise in bulk, but only giveth place: for you may not think, that in printing of wax, the wax riseth up at all; but only the depressed part giveth place, and the other remaineth as it was. The other that altereth bulk in the cession, as water, or other liquors, if you put a stone or any thing into them, they give place indeed easily, but then they rise all over; which is a false cession; for it is in place, and not in body.

Experiment solitary touching bodies ductile and tensile.

845. All bodies ductile and tensile, as metals, that will be drawn into wires; wool and tow, that will be drawn into yarn or thread, have in them the appetite of not discontinuing strong, which maketh them follow the force that pulleth them out; and yet so, as not to discontinue or forsake their own body. Viscous bodies likewise, as pitch, wax, bird-lime, cheese toasted, will draw forth and rope. But the difference between bodies fibrous and bodies viscous is plain: for all wool, and tow, and cotton, and silk, especially raw silk, have, besides their desire of continuance, in regard of the tenuity of their thread, a greediness of moisture: and

by moisture to join and incorporate with other thread; especially if there be a little wreathing; as appeareth by the twisting of thread, and the practice of twirling about of spindles. And we see also, that gold and silver thread cannot be made without twisting.

Experiment solitary touching other passions of matter, and characters of bodies.

846. The differences of impressible and not impressible; figurable and not figurable; mouldable and not mouldable; scissile and not scissile; and many other passions of matter, are plebeian notions, applied unto the instruments and uses which men ordinarily practise; but they are all but the effects of some of these causes following, which we will enumerate without applying them, because that will be too long. The first is the cession, or not cession of bodies, into a smaller space or room, keeping the outward bulk, and not flying up. The second is the stronger or weaker appetite in bodies to continuity, and to fly discontinuity. The third is the disposition of bodies to contract, or not contract: and again, to extend, or not extend. The fourth is the small quantity, or great quantity of the pneumatical in bodies. The fifth is the nature of the pneumatical, whether it be native spirit of the body, or common air. The sixth is the nature of the native spirits in the body, whether they be active and eager, or dull and gentle. The seventh is the emission, or detention of the spirits in bodies. The eighth is the dilatation, or contraction of the spirits in bodies, while they are detained. The ninth is the collocation of the spirits in bodies, whether the collocation be equal, or unequal; and again, whether the spirits be coacervate, or diffused. The tenth is the density, or rarity of the tangible parts. The eleventh is the equality, or inequality of the tangible parts. The twelfth is the digestion, or crudity of the tangible parts. The thirteenth is the nature of the matter, whether sulphureous or mercurial, watery or oily, dry and terrestrial, or moist and liquid; which natures of sulphureous and mercurial, seem to be natures radical and principal. The

fourteenth is the placing of the tangible parts in length or transverse, as it is in the warp and the woof of textiles, more inward, or more outward, etc. The fifteenth is the porosity or imporosity betwixt the tangible parts, and the greatness or smallness of the pores. The sixteenth is the collocation and posture of the pores. There may be more causes; but these do occur for the present.

Experiment solitary touching induration by sympathy.

847. Take lead and melt it, and in the midst of it, when it beginneth to congeal, make a little dent or hole, and put quicksilver wrapped in a piece of linen into that hole, and the quicksilver will fix and run no more, and endure the hammer. This is a noble instance of induration, by consent of one body with another, and motion of excitation to imitate; for to ascribe it only to the vapour of lead, is less probable. *Query*, whether the fixing may be in such a degree, as it will be figured like other metals? For if so, you may make works of it for some purposes, so they come not near the fire.

Experiment solitary touching honey and sugar.

848. Sugar hath put down the use of honey, insomuch as we have lost those observations and preparations of honey which the ancients had, when it was more in price. First, it seemeth that there was in old time tree-honey, as well as bee-honey, which was the tear or blood issuing from the tree: insomuch as one of the ancients relateth, that in Trebisond there was honey issuing from the box-trees, which made men mad. Again, in ancient time there was a kind of honey, which either of its own nature, or by art, would grow as hard as sugar, and was not so luscious as ours. They had also a wine of honey, which they made thus. They crushed the honey into a great quantity of water, and then strained the liquor: after they boiled it in a copper to the half; then they poured it into earthen vessels for a small time; and after turned it into vessels of wood, and kept it for many years. They have also at

this day, in Russia and those northern countries, mead simple, which, well made and seasoned, is a good wholesome drink, and very clear. They use also in Wales a compound drink of mead, with herbs and spices. But mean while it were good, in recompence of that we have lost in honey, there were brought in use a sugar-mead, for so we may call it, though without any mixture at all of honey; and to brew it, and keep it stale, as they use mead: for certainly, though it would not be so abstersive, and opening, and solutive a drink as mead; yet it will be more grateful to the stomach, and more lenitive, and fit to be used in sharp diseases: for we see, that the use of sugar in beer and ale hath good effects in such cases.

Experiment solitary touching the finer sort of base metals.

849. It is reported by the ancients, that there was a kind of steel in some places, which would polish almost as white and bright as silver. And that there was in India a kind of brass, which, being polished, could scarce be discerned from gold. This was in the natural ure: but I am doubtful, whether men have sufficiently refined metals, which we count base; as whether iron, brass, and tin be refined to the height? But when they come to such a fineness, as serveth the ordinary use, they try no farther.

Experiment solitary touching cements and quarries.

850. There have been found certain cements under earth that are very soft; and yet, taken forth into the sun, harden as hard as marble: there are also ordinary quarries in Somersetshire, which in the quarry cut soft to any bigness, and in the building prove firm and hard.

Experiment solitary touching the altering of the colour of hairs and feathers.

851. Living creatures generally do change their hair with age, turning to be grey and white: as is seen in men, though some earlier, some later; in horses that are dappled, and turn white; in old squirrels that turn grisly; and many others. So do some birds; as cyg-

nets from grey turn white; hawks from brown turn more white. And some birds there be that upon their moulting do turn colour; as robin-red-breasts, after their moulting, grow to be red again by degrees; so do goldfinches upon the head. The cause is, for that moisture doth chiefly colour hair and feathers, and dryness turneth them grey and white; now hair in age waxeth dryer; so do feathers. As for feathers, after moulting, they are young feathers, and so all one as the feathers of young birds. So the beard is younger than the hair of the head, and doth, for the most part, wax hoary later. Out of this ground a man may devise the means of altering the colour of birds, and the retardation of hoary hairs. But of this see the fifth experiment.

Experiment solitary touching the differences of living creatures, male and female.

852. The difference between male and female, in some creatures, is not to be discerned, otherwise than in the parts of generation: as in horses and mares, dogs and bitches, doves he and she, and others. But some differ in magnitude, and that diversly; for in most the male is the greater; as in man, pheasants, peacocks, turkeys, and the like: and in some few, as in hawks, the female. Some differ in the hair and feathers, both in the quantity, crispation, and colours of them; as he-lions are hirsute, and have great manes: the she-lions are smooth like cats. Bulls are more crisp upon the forehead than cows; the peacock, and pheasant-cock, and goldfinch-cock, have glorious and fine colours; the hens have not. Generally the males in birds have the fairest feathers. Some differ in divers features: as bucks have horns, does none; rams have more wreathed horns than ewes; cocks have great combs and spurs, hens little or none; boars have great fangs, sows much less; the turkey-cock hath great and swelling gills, the hen hath less; men have generally deeper and stronger voices than women. Some differ in faculty; as the cocks amongst singing-birds are the best singers. The chief cause of all these, no doubt, is, for that the males have more strength of heat than the females; which appear-

eth manifestly in this, that all young creatures males are like females; and so are eunuchs, and gelt creatures of all kinds, liker females. Now heat causeth greatness of growth, generally, where there is moisture enough to work upon: but if there be found in any creature, which is seen rarely, an over-great heat in proportion to the moisture, in them the female is the greater; as in hawks and sparrows. And if the heat be balanced with the moisture, then there is no difference to be seen between male and female; as in the instances of horses and dogs. We see also, that the horns of oxen and cows, for the most part, are larger than the bulls; which is caused by abundance of moisture, which in the horns of the bull faileth. Again, heat causeth pilosity and crispation, and so likewise beards in men. It also expelleth finer moisture, which want of heat cannot expel; and that is the cause of the beauty and variety of feathers. Again, heat doth put forth many excrescences, and much solid matter, which want of heat cannot do: and this is the cause of horns, and of the greatness of them; and of the greatness of the combs and spurs of cocks, gills of turkey-cocks, and fangs of boars. Heat also dilateth the pipes and organs, which causeth the deepness of the voice. Again, heat refineth the spirits, and that causeth the cock singing-bird to excel the hen.

Experiment solitary touching the comparative magnitude of living creatures.

853. There be fishes greater than any beasts; as the whale is far greater than the elephant: and beasts are generally greater than birds. For fishes, the cause may be, that because they live not in the air, they have not their moisture drawn and soaked by the air and sun-beams. Also they rest always in a manner, and are supported by the water; whereas motion and labour do consume. As for the greatness of beasts more than of birds, it is caused, for that beasts stay longer time in the womb than birds, and there nourish and grow; whereas in birds, after the egg laid, there is no further

growth or nourishment from the female; for the sitting doth vivify, and not nourish.

Experiment solitary touching exossation of fruits.

854. We have partly touched before the means of producing fruits without cores or stones. And this we add farther, that the cause must be abundance of moisture; for that the core and stone are made of a dry sap: and we see, that it is possible to make a tree put forth only in blossom, without fruit; as in cherries with double flowers; much more into fruit without stone or cores. It is reported, that a cion of an apple, grafted upon a colewort stalk, sendeth forth a great apple without a core. It is not unlikely, that if the inward pith of a tree were taken out, so that the juice came only by the bark, it would work the effect. For it hath been observed, that in pollards, if the water get in on the top, and they become hollow, they put forth the more. We add also, that it is delivered for certain by some, that if the cion be grafted the small end downwards, it will make fruit have little or no cores and stones.

Experiment solitary touching the melioration of tobacco.

855. Tobacco is a thing of great price, if it be in request: for an acre of it will be worth, as is affirmed, two hundred pounds by the year towards charge. The charge of making the ground and otherwise is great, but nothing to the profit; but the English tobacco hath small credit, as being too dull and earthy: nay, the Virginian tobacco, though that be in a hotter climate, can get no credit for the same cause: so that a trial to make tobacco more aromatical, and better concocted, here in England, were a thing of great profit. Some have gone about to do it by drenching the English tobacco in a decoction or infusion of Indian tobacco: but those are but sophistications and toys; for nothing that is once perfect, and hath run its race, can receive much amendment. You must ever resort to the beginnings of things for melioration. The way of maturation of tobacco must, as in other plants, be from the heat either of the earth or of the

sun: we see some leading of this in musk-melons, which are sown upon a hot-bed dunged below, upon a bank turned upon the south sun, to give heat by reflection; laid upon tiles, which increaseth the heat, and covered with straw to keep them from cold. They remove them also, which addeth some life: and by these helps they become as good in England, as in Italy or Provence. These, and the like means, may be tried in tobacco. Inquire also of the steeping of the roots in some such liquor as may give them vigour to put forth strong.

Experiment solitary touching several heats working the same effects.

856. Heat of the sun for the maturation of fruits; yea, and the heat of vivification of living creatures, are both represented and supplied by the heat of fire; and likewise the heats of the sun, and life, are represented one by the other. Trees set upon the backs of chimneys do ripen fruit sooner. Vines, that have been drawn in at the window of a kitchen, have sent forth grapes ripe a month at least before others. Stoves at the back of walls bring forth oranges here with us. Eggs, as is reported by some, have been hatched in the warmth of an oven. It is reported by the ancients, that the ostrich layeth her eggs under sand, where the heat of the sun discloseth them.

Experiment solitary touching swelling and dilatation in boiling.

857. Barley in the boiling swelleth not much; wheat swelleth more; rice extremely; insomuch as a quarter of a pint, unboiled, will arise to a pint boiled. The cause no doubt is, for that the more close and compact the body is, the more it will dilate: now barley is the most hollow; wheat more solid than that; and rice most solid of all. It may be also that some bodies have a kind of lentour, and more depertible nature than others; as we see it evident in coloration; for a small quantity of saffron will tinct more than a very great quantity of brasil or wine.

Experiment solitary touching the dulcoration of fruits.

858. Fruit groweth sweet by rolling, or pressing them

gently with the hand; as rolling pears, damascenes, etc. by rottenness; as medlars, services, sloes, hips, etc. by time; as apples, wardens, pomegranates, etc. by certain special maturations; as by laying them in hay, straw, etc. and by fire; as in roasting, stewing, baking, etc. The cause of the sweetness by rolling and pressing, is emollition, which they properly induce; as in beating of stock-fish, flesh, etc. by rottenness is, for that the spirits of the fruit by putrefaction gather heat, and thereby digest the harder part, for in all putrefactions there is a degree of heat: by time and keeping is, because the spirits of the body do ever feed upon the tangible parts, and attenuate them: by several maturations is, by some degree of heat: and by fire is, because it is the proper work of heat to refine, and to incorporate; and all sourness consisteth in some grossness of the body; and all incorporation doth make the mixture of the body more equal in all the parts; which ever induceth a milder taste.

Experiment solitary touching flesh edible, and not edible.

859. Of fleshes, some are edible; some, except it be in famine, not. For those that are not edible, the cause is, for that they have commonly too much bitterness of taste; and therefore those creatures which are fierce and choleric are not edible; as lions, wolves, squirrels, dogs, foxes, horses, etc. As for kine, sheep, goats, deer, swine, conies, hares, etc. we see they are mild and fearful. Yet it is true, that horses, which are beasts of courage, have been, and are eaten by some nations; as the Scythians were called Hippophagi; and the Chineses eat horse-flesh at this day; and some gluttons have used to have colts-flesh baked. In birds, such as are *carnivoræ*, and birds of prey, are commonly no good meat: but the reason is, rather the choleric nature of those birds, than their feeding upon flesh: for pewets, gulls, shovelers, ducks, do feed upon flesh, and yet are good meat. And we see that those birds which are of prey, or feed upon flesh, are good meat when they are very young; as hawks, rooks out of the nest, owls, etc. Man's flesh is not eaten. The reasons are three: first, because men in humanity do abhor it: secondly, because no living creature that dieth of it-

self is good to eat: and therefore the cannibals themselves eat no man's flesh of those that die of themselves, but of such as are slain. The third is, because there must be generally some disparity between the nourishment and the body nourished; and they must not be over-near, or like: yet we see, that in great weaknesses and consumptions, men have been sustained with woman's milk; and Ficinus, fondly, as I conceive, adviseth, for the prolongation of life, that a vein be opened in the arm of some wholesome young man, and the blood to be sucked. It is said that witches do greedily eat man's flesh; which if it be true, besides a devilish appetite in them, it is likely to proceed, for that man's flesh may send up high and pleasing vapours, which may stir the imagination; and witches felicity is chiefly in imagination, as hath been said.

Experiment solitary touching the salamander.

860. There is an ancient received tradition of the salamander, that it liveth in the fire, and hath force also to extinguish the fire. It must have two things, if it be true, to this operation: the one a very close skin, whereby flame, which in the midst is not so hot, cannot enter; for we see that if the palm of the hand be anointed thick with white of egg, and then aqua vitæ be poured upon it, and inflamed, yet one may endure the flame a pretty while. The other is some extreme cold and quenching virtue in the body of that creature, which choketh the fire. We see that milk quencheth wild-fire better than water, because it entereth better.

Experiment solitary touching the contrary operations of time upon fruits and liquors.

861. Time doth change fruit, as apples, pears, pomegranates, etc. from more sour to more sweet: but contrariwise liquors, even those that are of the juice of fruit, from more sweet to more sour: as wort, muste, new verjuice, etc. The cause is, the congregation of the spirits together: for in both kinds the spirit is attenuated by time; but in the first kind it is more diffused, and more mastered by the grosser parts, which the spirits do but digest: but

in drinks the spirits do reign, and finding less opposition of the parts, become themselves more strong; which causeth also more strength in the liquor; such as, if the spirits be of the hotter sort, the liquor becometh apt to burn: but in time, it causeth likewise, when the higher spirits are evaporated, more sourness.

Experiment solitary touching blows and bruises.

862. It hath been observed by the ancients, that plates of metal, and especially of brass, applied presently to a blow, will keep it down from swelling. The cause is repercussion, without humectation or entrance of any body: for the plate hath only a virtual cold, which doth not search into the hurt; whereas all plaisters and ointments do enter. Surely, the cause that blows and bruises induce swellings is, for that the spirits resorting to succour the part that laboureth, draw also the humours with them: for we see, that it is not the repulse and the return of the humour in the part strucken that causeth it; for that gouts and tooth-aches cause swelling, where there is no percussion at all.

Experiment solitary touching the orrice root.

863. The nature of the orrice root is almost singular; for there be few odoriferous roots; and in those that are in any degree sweet, it is but the same sweetness with the wood or leaf: but the orrice is not sweet in the leaf; neither is the flower any thing so sweet as the root. The root seemeth to have a tender dainty heat; which, when it cometh above ground to the sun and the air, vanisheth: for it is a great mollifier; and hath a smell like a violet.

Experiment solitary touching the compression of liquors.

864. It hath been observed by the ancients, that a great vessel full, drawn into bottles, and then the liquor put again into the vessel, will not fill the vessel again so full as it was, but that it may take in more liquor: and that this holdeth more in wine than in water. The cause may be trivial; namely, by the expence of the liquor, in regard some may stick to the sides of the bottles: but there may be a cause more subtile; which is, that the liquor in the

vessel is not so much compressed as in the bottle; because in the vessel the liquor meeteth with liquor chiefly; but in the bottles a small quantity of liquor meeteth with the sides of the bottles, which compress it so that it doth not open again.

Experiment solitary touching the working of water upon air contiguous.

865. Water, being contiguous with air, cooleth it, but moisteneth it not, except it vapour. The cause is, for that heat and cold have a virtual transition, without communication of substance; but moisture not: and to all madefaction there is required an imbibition: but where the bodies are of such several levity and gravity as they mingle not, there can follow no imbibition. And therefore, oil likewise lieth at the top of the water, without commixture: and a drop of water running swiftly over a straw or smooth body, wetteth not.

Experiment solitary touching the nature of air.

866. Starlight nights, yea, and bright moonshine nights, are colder than cloudy nights. The cause is, the dryness and fineness of the air, which thereby becometh more piercing and sharp; and therefore great continents are colder than islands: and as for the moon, though itself inclineth the air to moisture, yet when it shineth bright, it argueth the air is dry. Also close air is warmer than open air; which, it may be, is, for that the true cause of cold is an expiration from the globe of the earth, which in open places is stronger; and again, air itself, if it be not altered by that expiration, is not without some secret degree of heat; as it is not likewise without some secret degree of light: for otherwise cats and owls could not see in the night; but that air hath a little light, proportionable to the visual spirits of those creatures.

Experiments in consort touching the eyes and sight.

867. The eyes do move one and the same way; for when one eye moveth to the nostril, the other moveth from the nostril. The cause is motion of consent, which in the spirits and parts spiritual is strong. But yet

use will induce the contrary; for some can squint when they will: and the common tradition is, that if children be set upon a table with a candle behind them, both eyes will move outwards, as affecting to see the light, and so induce squinting.

868. We see more exquisitely with one eye shut, than with both open. The cause is, for that the spirits visual unite themselves more, and so become stronger. For you may see, by looking in a glass, that when you shut one eye, the pupil of the other eye that is open dilateth.

869. The eyes, if the sight meet not in one angle, see things double. The cause is, for that seeing two things, and seeing one thing twice, worketh the same effect: and therefore a little pellet held between two fingers laid across, seemeth double.

870. Pore-blind men see best in the dimmer lights; and likewise have their sight stronger near hand, than those that are not pore-blind; and can read and write smaller letters. The cause is, for that the spirits visual in those that are pore-blind, are thinner and rarer than in others; and therefore the greater light disperseth them. For the same cause they need contracting; but being contracted, are more strong than the visual spirits of ordinary eyes are; as when we see through a level, the sight is the stronger; and so is it when you gather the eye-lids somewhat close: and it is commonly seen in those that are pore-blind, that they do much gather the eye-lids together. But old men, when they would see to read, put the paper somewhat afar off: the cause is, for that old mens spirits visual, contrary to those of pore-blind men, unite not, but when the object is at some good distance from their eyes.

871. Men see better, when their eyes are over-against the sun or a candle, if they put their hand a little before their eye. The reason is, for that the glaring of the sun or the candle doth weaken the eye; whereas the light circumfused is enough for the perception. For we see that an over-light maketh the eyes dazzle; insomuch as perpetual looking against the sun would cause blindness. Again, if men come out of a great light into a dark room; and contrariwise, if they come out

of a dark room into a light room, they seem to have a mist before their eyes, and see worse than they shall do after they have stayed a little while, either in the light or in the dark. The cause is, for that the spirits visual are, upon a sudden change, disturbed and put out of order; and till they be recollected do not perform their function well. For when they are much dilated by light, they cannot contract suddenly; and when they are much contracted by darkness, they cannot dilate suddenly. And excess of both these, that is, of the dilatation and contraction of the spirits visual, if it be long, destroyeth the eye. For as long looking against the sun or fire hurteth the eye by dilatation; so curious painting in small volumes, and reading of small letters, do hurt the eye by contraction.

872. It hath been observed, that in anger the eyes wax red: and in blushing, not the eyes, but the ears, and the parts behind them. The cause is, for that in anger the spirits ascend and wax eager; which is most easily seen in the eyes, because they are translucid; though withal it maketh both the cheeks and the gills red; but in blushing, it is true the spirits ascend likewise to succour both the eyes and the face, which are the parts that labour: but then they are repulsed by the eyes, for that the eyes, in shame, do put back the spirits that ascend to them, as unwilling to look abroad: for no man in that passion doth look strongly, but dejectedly; and that repulsion from the eyes diverteth the spirits and heat more to the ears, and the parts by them.

873. The objects of the sight may cause a great pleasure and delight in the spirits, but no pain or great offence; except it be by memory, as hath been said. The glimpses and beams of diamonds that strike the eye; Indian feathers, that have glorious colours; the coming into a fair garden; the coming into a fair room richly furnished; a beautiful person; and the like; do delight and exhilarate the spirits much. The reason why it holdeth not in the offence is, for that the sight is the most spiritual of the senses; whereby it hath no object gross enough to offend it. But the cause chiefly is, for that there be no active objects to offend the eye.

For harmonical sounds, and discordant sounds, are both active and positive: so are sweet smells and stinks: so are bitter and sweet in tastes: so are over-hot and over-cold in touch: but blackness and darkness are indeed but privatives; and therefore have little or no activity. Somewhat they do contristate, but very little.

Experiment solitary touching the colour of the sea, or other water.

874. Water of the sea, or otherwise, looketh blacker when it is moved, and whiter when it resteth. The cause is, for that by means of the motion, the beams of light pass not straight, and therefore must be darkened; whereas, when it resteth, the beams do pass straight. Besides, splendour hath a degree of whiteness; especially if there be a little repercussion: for a looking-glass with the steel behind, looketh whiter than glass simple. This experiment deserveth to be driven farther, in trying by what means motion may hinder sight.

Experiment solitary touching shell-fish.

875. Shell-fish have been, by some of the ancients, compared and sorted with the *insecta;* but I see no reason why they should; for they have male and female as other fish have: neither are they bred of putrefaction; especially such as do move. Nevertheless it is certain, that oisters, and cockles, and mussels, which move not, have no discriminate sex. *Query*, in what time, and how they are bred? It seemeth, that shells of oisters are bred where none were before; and it is tried, that the great horse-mussel, with the fine shell, that breedeth in ponds, hath bred within thirty years: but then, which is strange, it hath been tried, that they do not only gape and shut as the oisters do, but remove from one place to another.

Experiment solitary touching the right side and the left.

876. The senses are alike strong, both on the right side and on the left; but the limbs on the right side are stronger. The cause may be, for that the brain, which is the instrument of sense, is alike on both sides; but motion, and abilities of moving, are somewhat

holpen from the liver, which lieth on the right side. It may be also, for that the senses are put in exercise indifferently on both sides from the time of our birth; but the limbs are used most on the right side, whereby custom helpeth; for we see that some are left-handed; which are such as have used the left hand most.

Experiment solitary touching frictions.

877. Frictions make the parts more fleshy and full; as we see both in men, and in the currying of horses, etc. The cause is, for that they draw greater quantity of spirits and blood to the parts: and again, because they draw the aliment more forcibly from within: and again, because they relax the pores, and so make better passage for the spirits, blood, and aliment: lastly, because they dissipate and digest any inutile or excrementitious moisture which lieth in the flesh; all which help assimilation. Frictions also do more fill and impinguate the body, than exercise. The cause is, for that in frictions the inward parts are at rest; which in exercise are beaten, many times, too much: and for the same reason, as we have noted heretofore, galley-slaves are fat and fleshy, because they stir the limbs more, and the inward parts less.

Experiment solitary touching globes appearing flat at distance.

878. All globes afar off appear flat. The cause is, for that distance, being a secondary object of sight, is not otherwise discerned, than by more or less light; which disparity, when it cannot be discerned, all seemeth one: as it is, generally, in objects not distinctly discerned; for so letters, if they be so far off as they cannot be discerned, shew but as a duskish paper; and all engravings and embossings, afar off, appear plain.

Experiment solitary touching shadows.

879. The uttermost parts of shadows seem ever to tremble. The cause is, for that the little motes which we see in the sun do ever stir, though there be no wind; and therefore those moving, in the meeting of the light and the shadow, from the light to the shadow,

and from the shadow to the light, do shew the shadow to move, because the medium moveth.

Experiment solitary touching the rolling and breaking of the seas.

880. Shallow and narrow seas break more than deep and large. The cause is, for that, the impulsion being the same in both, where there is greater quantity of water, and likewise space enough, there the water rolleth and moveth, both more slowly, and with a sloper rise and fall: but where there is less water, and less space, and the water dasheth more against the bottom, there it moveth more swiftly, and more in precipice; for in the breaking of the waves there is ever a precipice.

Experiment solitary touching the dulcoration of salt water.

881. It hath been observed by the ancients, that salt water boiled, or boiled and cooled again, is more potable, than of itself raw: and yet the taste of salt in distillations by fire riseth not, for the distilled water will be fresh. The cause may be, for that the salt part of the water doth partly rise into a kind of scum on the top, and partly goeth into a sediment in the bottom; and so is rather a separation than an evaporation. But it is too gross to rise into a vapour; and so is a bitter taste likewise; for simple distilled waters, of wormwood, and the like, are not bitter.

Experiment solitary touching the return of saltness in pits upon the sea-shore.

882. It hath been set down before, that pits upon the sea-shore turn into fresh water, by percolation of the salt through the sand: but it is farther noted, by some of the ancients, that in some places of Africa, after a time, the water in such pits will become brackish again. The cause is, for that after a time, the very sands through which the salt passeth, become salt; and so the strainer itself is tinctured with salt. The remedy therefore is, to dig still new pits, when the old wax brackish; as if you would change your strainer.

Experiment solitary touching attraction by similitude of substance.

883. It hath been observed by the ancients, that salt water will dissolve salt put into it, in less time than fresh water will dissolve it. The cause may be, for that the salt in the precedent water doth, by similitude of substance, draw the salt new put in unto it; whereby it diffuseth in the liquor more speedily. This is a noble experiment, if it be true, for it sheweth means of more quick and easy infusions; and it is likewise a good instance of attraction by similitude of substance. Try it with sugar put into water formerly sugared, and into other water unsugared.

Experiment solitary touching attraction.

884. Put sugar into wine, part of it above, part under the wine, and you shall find, that which may seem strange, that the sugar above the wine will soften and dissolve sooner than that within the wine. The cause is, for that the wine entereth that part of the sugar which is under the wine, by simple infusion or spreading; but that part above the wine is likewise forced by sucking; for all spongy bodies expel the air and draw in liquor, if it be contiguous: as we see it also in sponges put part above the water. It is worthy the inquiry, to see how you may make more accurate infusions, by help of attraction.

Experiment solitary touching heat under earth.

885. Water in wells is warmer in winter than in summer; and so air in caves. The cause is, for that in the hither parts, under the earth, there is a degree of some heat, as appeareth in sulphureous veins, etc. which shut close in, as in winter, is the more; but if it perspire, as it doth in summer, it is the less.

Experiment solitary touching flying in the air.

886. It is reported, that amongst the Leucadians, in ancient time, upon a superstition they did use to precipitate a man from a high cliff into the sea; tying about him with strings, at some distance, many great

fowls; and fixing unto his body divers feathers, spread, to break the fall. Certainly many birds of good wing, as kites, and the like, would bear up a good weight, as they fly; and spreading of feathers thin and close, and in great breadth, will likewise bear up a great weight, being even laid, without tilting upon the sides. The farther extension of this experiment for flying may be thought upon.

Experiment solitary touching the dye of scarlet.

887. There is in some places, namely in Cephalonia, a little shrub which they call holly-oak, or dwarf-oak: upon the leaves whereof there riseth a tumour like a blister; which they gather, and rub out of it a certain red dust, that converteth, after a while, into worms, which they kill with wine, as is reported, when they begin to quicken: with this dust they dye scarlet.

Experiment solitary touching maleficiating.

888. In Zant it is very ordinary to make men impotent to accompany with their wives. The like is practised in Gascony; where it is called *nouër l'eguillette.* It is practised always upon the wedding-day. And in Zant the mothers themselves do it, by way of prevention; because thereby they hinder other charms; and can undo their own. It is a thing the civil law taketh knowledge of; and therefore is of no light regard.

Experiment solitary touching the rise of water by means of flame.

889. It is a common experiment, but the cause is mistaken. Take a pot, or better a glass, because therein you may see the motion, and set a candle lighted in the bottom of a bason of water, and turn the mouth of the pot or glass over the candle, and it will make the water rise. They ascribe it to the drawing of heat; which is not true: for it appeareth plainly to be but a motion of *nexe*, which they call *ne detur vacuum;* and it proceedeth thus. The flame of the candle, as soon as it is covered, being suffocated by the close air, lesseneth by little and little; during which time there is some

little ascent of water, but not much: for the flame occupying less and less room, as it lesseneth, the water succeedeth. But upon the instant of the candle's going out, there is a sudden rise of a great deal of water; for that the body of the flame filleth no more place, and so the air and the water succeed. It worketh the same effect, if instead of water you put flour or sand into the bason: which sheweth, that it is not the flame's drawing the liquor as nourishment, as it is supposed; for all bodies are alike unto it, as it is ever in motion of *nexe;* insomuch as I have seen the glass, being held by the hand, hath lifted up the bason and all; the motion of *nexe* did so clasp the bottom of the bason. That experiment, when the bason was lifted up, was made with oil, and not with water: nevertheless this is true, that at the very first setting of the mouth of the glass upon the bottom of the bason, it draweth up the water a little, and then standeth at a stay, almost till the candle's going out, as was said. This may shew some attraction at first: but of this we will speak more, when we handle attractions by heat.

Experiments in consort touching the influences of the moon.

Of the power of the celestial bodies, and what more secret influences they have, besides the two manifest influences of heat and light, we shall speak when we handle experiments touching the celestial bodies; mean while we will give some directions for more certain trials of the virtue and influences of the moon, which is our nearest neighbour.

The influences of the moon, most observed, are four; the drawing forth of heat; the inducing of putrefaction; the increase of moisture; the exciting of the motions of spirits.

890. For the drawing forth of heat, we have formerly prescribed to take water warm, and to set part of it against the moon-beams, and part of it with a screen between; and to see whether that which standeth exposed to the beams will not cool sooner. But because this is but a small interposition, though in the sun we see a small shade doth much, it were good to try it

420871

when the moon shineth, and when the moon shineth not at all; and with water warm in a glass bottle, as well as in a dish; and with cinders; and with iron red-hot, etc.

891. For the inducing of putrefaction, it were good to try it with flesh or fish exposed to the moon-beams; and again exposed to the air when the moon shineth not, for the like time; to see whether will corrupt sooner: and try it also with capon, or some other fowl, laid abroad, to see whether it will mortify and become tender sooner: try it also with dead flies, or dead worms, having a little water cast upon them, to see whether will putrify sooner. Try it also with an apple or orange, having holes made in their tops, to see whether will rot or mould sooner. Try it also with Holland cheese, having wine put into it, whether will breed mites sooner or greater.

892. For the increase of moisture, the opinion received is; that seeds will grow soonest; and hair, and nails, and hedges, and herbs, cut, etc. will grow soonest, if they be set or cut in the increase of the moon. Also that brains in rabbits, woodcocks, calves, etc. are fullest in the full of the moon: and so of marrow in the bones: and so of oisters and cockles, which of all the rest are the easiest tried if you have them in pits.

893. Take some seeds, or roots, as onions, etc. and set some of them immediately after the change; and others of the same kind immediately after the full: let them be as like as can be; the earth also the same as near as may be; and therefore best in pots. Let the pots also stand where no rain or sun may come to them. lest the difference of the weather confound the experiment: and then see in what time the seeds set in the increase of the moon come to a certain height; and how they differ from those that are set in the decrease of the moon.

894. It is like, that the brain of man waxeth moister and fuller upon the full of the moon: and therefore it were good for those that have moist brains, and are great drinkers, to take fume of lignum aloës, rosemary, frankincense, etc. about the full of the moon. It is like

also, that the humours in mens bodies increase and decrease as the moon doth: and therefore it were good to purge some day or two after the full; for that then the humours will not replenish so soon again.

895. As for the exciting of the motion of the spirits, you must note that the growth of hedges, herbs, hair, etc. is caused from the moon, by exciting of the spirits, as well as by increase of the moisture. But for spirits in particular, the great instance is in lunacies.

896. There may be other secret effects of the influence of the moon, which are not yet brought into observation. It may be, that if it so fall out that the wind be north, or north-east, in the full of the moon, it increaseth cold; and if south, or south-west, it disposeth the air for a good while to warmth and rain; which would be observed.

897. It may be, that children, and young cattle, that are brought forth in the full of the moon, are stronger and larger than those that are brought forth in the wane; and those also which are begotten in the full of the moon: so that it might be good husbandry to put rams and bulls to their females, somewhat before the full of the moon. It may be also, that the eggs laid in the full of the moon breed the better bird; and a number of the like effects which may be brought into observation. *Query* also, whether great thunders and earthquakes be not most in the full of the moon.

Experiment solitary touching vinegar.

898. The turning of wine to vinegar is a kind of putrefaction: and in making of vinegar, they use to set vessels of wine over-against the noon sun; which calleth out the more oily spirits, and leaveth the liquor more sour and hard. We see also, that burnt wine is more hard and astringent than wine unburnt. It is said, that cider in navigations under the line ripeneth, when wine or beer soureth. It were good to set a rundlet of verjuice over-against the sun in summer, as they do vinegar, to see whether it will ripen and sweeten.

Experiment solitary touching creatures that sleep all winter.

899. There be divers creatures that sleep all winter, as the bear, the hedge-hog, the bat, the bee, etc. These all wax fat when they sleep, and egest not. The cause of their fattening during their sleeping time, may be the want of assimilating; for whatsoever assimilateth not to flesh turneth either to sweat or fat. These creatures, for part of their sleeping time, have been observed not to stir at all; and for the other part, to stir, but not to remove. And they get warm and close places to sleep in. When the Flemings wintered in Nova Zembla, the bears about the middle of November went to sleep; and then the foxes began to come forth, which durst not before. It is noted by some of the ancients, that the she-bear breedeth, and lyeth in with her young, during that time of rest: and that a bear big with young hath seldom been seen.

Experiment solitary touching the generation of creatures by copulation, and by putrefaction.

900. Some living creatures are procreated by copulation between male and female: some by putrefaction: and of those which come by putrefaction, many do, nevertheless, afterwards procreate by copulation. For the cause of both generations: first, it is most certain, that the cause of all vivification is a gentle and proportionable heat, working upon a glutinous and yielding substance: for the heat doth bring forth spirit in that substance: and the substance being glutinous produceth two effects; the one, that the spirit is detained, and cannot break forth: the other, that the matter being gentle and yielding, is driven forwards by the motion of the spirits, after some swelling, into shape and members. Therefore all sperm, all menstruous substance, all matter whereof creatures are produced by putrefaction, have evermore a closeness, lentor, and sequacity. It seemeth therefore, that the generation by sperm only, and by putrefaction, have two different causes. The first is, for that creatures which have a definite and exact shape, as those have which are procreated by copulation, cannot be produced by a weak and casual heat;

nor out of matter which is not exactly prepared according to the species. The second is, for that there is a greater time required for maturation of perfect creatures; for if the time required in vivification be of any length, then the spirit will exhale before the creature be mature; except it be inclosed in a place where it may have continuance of the heat, access of some nourishment to maintain it, and closeness that may keep it from exhaling: and such places are the wombs and matrices of the females. And therefore all creatures made of putrefaction are of more uncertain shape; and are made in shorter time; and need not so perfect an inclosure, though some closeness be commonly required. As for the Heathen opinion, which was, that upon great mutations of the world, perfect creatures were first engendered of concretion; as well as frogs, and worms, and flies, and such like, are now; we know it to be vain: but if any such thing should be admitted, discoursing according to sense, it cannot be, except you admit of a chaos first, and commixture of heaven and earth. For the frame of the world, once in order, cannot affect it by any excess or casualty.

NATURAL HISTORY.

CENTURY X.

Experiments in consort touching the transmission and influx of immateriate virtues; and the force of imagination.

THE philosophy of Pythagoras, which was full of superstition, did first plant a monstrous imagination, which afterwards was, by the school of Plato and others, watered and nourished. It was, that the world was one entire perfect living creature; insomuch as Apollonius of Tyana, a Pythagorean prophet, affirmed, that the ebbing and flowing of the sea was the respiration of the world, drawing in water as breath, and putting it forth again. They went on, and inferred, that if the world were a living creature, it had a soul and spirit; which also they held, calling it *spiritus mundi*, the spirit or soul of the world: by which they did not intend God, for they did admit of a Deity besides, but only the soul or essential form of the universe. This foundation being laid, they might build upon it what they would; for in a living creature, though never so great, as for example, in a great whale, the sense and the affects of any one part of the body instantly make a transcursion throughout the whole body: so that by this they did insinuate, that no distance of place, nor want of indisposition of matter, could hinder magical operations; but that, for example, we might here in Europe have sense and feeling of that which was done in China; and likewise we might work any effect without and against matter; and this not holpen by the co-operation of angels or spirits, but only by the unity and harmony of nature. There were some also that staid not here; but went farther, and held, that if the spirit of man, whom they call the microcosm, do give a fit touch to

the spirit of the world, by strong imaginations and beliefs, it might command nature; for Paracelsus, and some darksome authors of magic, do ascribe to imagination exalted the power of miracle-working faith. With these vast and bottomless follies men have been in part entertained.

But we, that hold firm to the works of God, and to the sense, which is God's lamp, "lucerna Dei spiraculum hominis," will inquire with all sobriety and severity, whether there be to be found in the footsteps of nature, any such transmission and influx of immateriate virtues; and what the force of imagination is; either upon the body imaginant, or upon another body: wherein it will be like that labour of Hercules, in purging the stable of Augeas, to separate from superstitious and magical arts and observations, any thing that is clean and pure natural; and not to be either contemned or condemned. And although we shall have occasion to speak of this in more places than one, yet we will now make some entrance thereinto.

Experiments in consort, monitory, touching transmission of spirits, and the force of imagination.

901. Men are to be admonished that they do not withdraw credit from the operations by transmission of spirits, and force of imagination, because the effects fail sometimes. For as in infection, and contagion from body to body, as the plague, and the like, it is most certain that the infection is received, many times, by the body passive, but yet is, by the strength and good disposition thereof, repulsed and wrought out, before it be formed into a disease; so much more in impressions from mind to mind, or from spirit to spirit, the impression taketh, but is encountered and overcome by the mind and spirit, which is passive, before it work any manifest effect. And therefore they work most upon weak minds and spirits; as those of women, sick persons, superstitious and fearful persons, children, and young creatures:

Nescio quis teneros oculus mihi fascinat agnos:

The poet speaketh not of sheep, but of lambs. As for the weakness of the power of them upon kings and magistrates, it may be ascribed, besides the main, which is the protection of God over those that execute his place, to the weakness of the imagination of the imaginant: for it is hard for a witch or a sorcerer to put on a belief that they can hurt such persons.

902. Men are to be admonished, on the other side, that they do not easily give place and credit to these operations, because they succeed many times; for the cause of this success is oft to be truly ascribed unto the force of affection and imagination upon the body agent; and then by a secondary means it may work upon a diverse body: as for example, if a man carry a planet's seal, or a ring, or some part of a beast, believing strongly that it will help him to obtain his love; or to keep him from danger of hurt in fight; or to prevail in a suit, etc. it may make him more active and industrious: and again, more confident and persisting, than otherwise he would be. Now the great effects that may come of industry and perseverance, especially in civil business, who knoweth not? For we see audacity doth almost bind and mate the weaker sort of minds; and the state of human actions is so variable, that to try things oft, and never to give over, doth wonders: therefore it were a mere fallacy and mistaking to ascribe that to the force of imagination upon another body which is but the force of imagination upon the proper body; for there is no doubt but that imagination and vehement affection work greatly upon the body of the imaginant; as we shall shew in due place.

903. Men are to be admonished, that as they are not to mistake the causes of these operations; so much less they are to mistake the fact or effect; and rashly to take that for done which is not done. And therefore, as diverse wise judges have prescribed and cautioned, men may not too rashly believe the confessions of witches, nor yet the evidence against them. For the witches themselves are imaginative, and believe oft-times they do that which they do not: and people are credulous in that point, and ready to impute accidents

and natural operations to witchcraft. It is worthy the observing, that both in ancient and late times, as in the Thessalian witches, and the meetings of witches that have been recorded by so many late confessions, the great wonders which they tell, of carrying in the air, transforming themselves into other bodies, etc. are still reported to be wrought, not by incantations or ceremonies, but by ointments, and anointing themselves all over. This may justly move a man to think that these fables are the effects of imagination: for it is certain that ointments do all, if they be laid on any thing thick, by stopping of the pores, shut in the vapours, and send them to the head extremely. And for the particular ingredients of those magical ointments, it is like they are opiate and soporiferous. For anointing of the forehead, neck, feet, back-bone, we know, is used for procuring dead sleeps: and if any man say that this effect would be better done by inward potions; answer may be made, that the medicines which go to the ointments are so strong, that if they were used inwards, they would kill those that use them: and therefore they work potently, though outwards.

We will divide the several kinds of the operations by transmission of spirits and imagination, which will give no small light to the experiments that follow. All operations by transmission of spirits and imagination have this; that they work at distance, and not at touch; and they are these being distinguished.

904. The first is the transmission or emission of the thinner and more airy parts of bodies; as in odours and infections; and this is, of all the rest, the most corporeal.

But you must remember withal, that there be a number of those emissions, both wholesome and unwholesome, that give no smell at all: for the plague, many times when it is taken, giveth no scent at all: and there be many good and healthful airs that do appear by habitation and other proofs, that differ not in smell from other airs. And under this head you may place all imbibitions of air, where the substance is material, odour-like; whereof some nevertheless are strange, and very suddenly diffused; as the alteration which the air receiveth in

Egypt, almost immediately, upon the rising of the river of Nilus, whereof we have spoken.

905. The second is the transmission or emission of those things that we call spiritual species: as visibles and sounds; the one whereof we have handled, and the other we shall handle in due place. These move swiftly, and at great distance; but then they require a medium well disposed, and their transmission is easily stopped.

906. The third is the emissions, which cause attraction of certain bodies at distance; wherein though the loadstone be commonly placed in the first rank, yet we think good to except it, and refer it to another head: but the drawing of amber and jet, and other electric bodies, and the attraction in gold of the spirit of quicksilver at distance; and the attraction of heat at distance; and that of fire to naphtha; and that of some herbs to water, though at distance; and divers others; we shall handle, but yet not under this present title, but under the title of attraction in general.

907. The fourth is the emission of spirits, and immateriate powers and virtues, in those things which work by the universal configuration and sympathy of the world; not by forms, or celestial influxes, as is vainly taught and received, but by the primitive nature of matter, and the seeds of things. Of this kind is, as we yet suppose, the working of the loadstone, which is by consent with the globe of the earth: of this kind is the motion of gravity, which is by consent of dense bodies with the globe of the earth: of this kind is some disposition of bodies to rotation, and particularly from east to west: of which kind we conceive the main float and refloat of the sea is, which is by consent of the universe, as part of the diurnal motion. These immateriate virtues have this property differing from others; that the diversity of the medium hindereth them not; but they pass through all mediums, yet at determinate distances. And of these we shall speak, as they are incident to several titles.

908. The fifth is the emission of spirits; and this is the principal in our intention to handle now in this place; namely, the operation of the spirits of the mind of man upon other spirits: and this is of a double nature; the

operations of the affections, if they be vehement; and the operation of the imagination, if it be strong. But these two are so coupled, as we shall handle them together; for when an envious or amorous aspect doth infect the spirits of another, there is joined both affection and imagination.

909. The sixth is, the influxes of the heavenly bodies, besides those two manifest ones, of heat and light. But these we will handle where we handle the celestial bodies and motions.

910. The seventh is the operations of sympathy, which the writers of natural magic have brought into an art or precept: and it is this; that if you desire to super-induce any virtue or disposition upon a person, you should take the living creature, in which that virtue is most eminent, and in perfection; of that creature you must take the parts wherein that virtue chiefly is collocate: again, you must take those parts in the time and act when that virtue is most in exercise; and then you must apply it to that part of man wherein that virtue chiefly consisteth. As if you would super-induce courage and fortitude, take a lion or a cock; and take the heart, tooth, or paw of the lion; or the heart or spur of the cock: take those parts immediately after the lion or the cock have been in fight; and let them be worn upon a man's heart or wrist. Of these and such like sympathies, we shall speak under this present title.

911. The eighth and last is, an emission of immateriate virtues; such as we are a little doubtful to propound; it is so prodigious: but that it is so constantly avouched by many; and we have set it down as a law to ourselves, to examine things to the bottom; and not to receive upon credit, or reject upon improbabilities, until there hath passed a due examination. This is the sympathy of individuals; for as there is a sympathy of species, so it may be there is a sympathy of individuals: that is, that in things, or the parts of things that have been once contiguous or entire, there should remain a transmission of virtue from the one to the other: as between the weapon and the wound. Whereupon is blazed abroad the operation of *unguentum teli:* and so of a piece of

lard, or stick of elder, etc. that if part of it be consumed or putrefied, it will work upon the other part severed. Now we will pursue the instances themselves.

Experiments in consort touching emission of spirits in vapour or exhalation, odour-like.

912. The plague is many times taken without manifest sense, as hath been said. And they report, that where it is found, it hath a scent of the smell of a mellow apple; and, as some say, of May-flowers: and it is also received, that smells of flowers that are mellow and luscious, are ill for the plague; as white lilies, cowslips, and hyacinths.

913. The plague is not easily received by such as continually are about them that have the plague; as keepers of the sick, and physicians; nor again by such as take antidotes, either inward, as mithridate, juniper-berries, rue, leaf and seed, etc. or outward, as angelica, zedoary, and the like, in the mouth; tar, galbanum, and the like, in perfume; nor again by old people, and such as are of a dry and cold complexion. On the other side, the plague taketh soonest hold of those that come out of a fresh air, and of those that are fasting, and of children; and it is likewise noted to go in a blood, more than to a stranger.

914. The most pernicious infection, next the plague, is the smell of the jail, when prisoners have been long, and close, and nastily kept; whereof we have had in our time experience twice or thrice; when both the judges that set upon the jail, and numbers of those that attended the business or were present, sickened upon it, and died. Therefore it were good wisdom, that in such cases the jail were aired before they be brought forth.

915. Out of question, if such foul smells be made by art, and by the hand, they consist chiefly of man's flesh or sweat putrified; for they are not those stinks which the nostrils straight abhor and expel, that are most pernicious; but such airs as have some similitude with man's body; and so insinuate themselves, and betray the spirits. There may be great danger in using such compositions, in great meetings of people within houses; as in churches, at arraignments, at plays and solemnities, and the like: for poisoning of air is no less dangerous than poisoning

of water, which hath been used by the Turks in the wars, and was used by Emmanuel Comnenus towards the Christians, when they passed through his country to the Holy Land. And these impoisonments of air are the more dangerous in meetings of people, because the much breath of people doth further the reception of the infection; and therefore, where any such thing is feared, it were good those public places were perfumed, before the assemblies.

916. The impoisonment of particular persons by odours, hath been reported to be in perfumed gloves, or the like: and it is like, they mingle the poison that is deadly, with some smells that are sweet, which also maketh it the sooner received. Plagues also have been raised by anointings of the chinks of doors, and the like; not so much by the touch, as for that it is common for men, when they find any thing wet upon their fingers, to put them to their nose; which men therefore should take heed how they do. The best is, that these compositions of infectious airs cannot be made without danger of death to them that make them. But then again, they may have some antidotes to save themselves; so that men ought not to be secure of it.

917. There have been in divers countries great plagues, by the putrefaction of great swarms of grasshoppers and locusts, when they have been dead and cast upon heaps.

918. It happeneth often in mines, that there are damps which kill, either by suffocation, or by the poisonous nature of the mineral: and those that deal much in refining, or other works about metals and minerals, have their brains hurt and stupified by the metalline vapours. Amongst which it is noted, that the spirits of quicksilver either fly to the skull, teeth, or bones; insomuch as gilders use to have a piece of gold in their mouth, to draw the spirits of the quicksilver; which gold afterwards they find to be whitened. There are also certain lakes and pits, such as that of Avernus, that poison birds, as is said, which fly over them, or men that stay too long about them.

919. The vapour of charcoal, or sea-coal, in a close room, hath killed many; and it is the more dangerous, because it cometh without any ill smell, but stealeth on

by little and little, inducing only a faintness, without any manifest strangling. When the Dutchmen wintered at Nova Zembla, and that they could gather no more sticks, they fell to make fire of some sea-coal they had, wherewith, at first, they were much refreshed; but a little after they had set about the fire, there grew a general silence and lothness to speak amongst them; and immediately after, one of the weakest of the company fell down in a swoon; whereupon they doubting what it was, opened their door to let in air, and so saved themselves. The effect, no doubt, is wrought by the inspissation of the air; and so of the breath and spirits. The like ensueth in rooms newly plaistered, if a fire be made in them; whereof no less man than the emperor Jovinianus died.

920. Vide the experiment 803, touching the infectious nature of the air, upon the first showers, after a long drought.

921. It hath come to pass, that some apothecaries, upon stamping of colloquintida, have been put into a great scouring by the vapour only.

922. It hath been a practice to burn a pepper they call Guiney-pepper, which hath such a strong spirit, that it provoketh a continual sneezing in those that are in the room.

923. It is an ancient tradition, that blear-eyes infect sound eyes; and that a menstruous woman, looking upon a glass, doth rust it: nay, they have an opinion which seemeth fabulous; that menstruous women going over a field or garden, do corn and herbs good by killing the worms.

924. The tradition is no less ancient, that the basilisk killeth by aspect; and that the wolf, if he see a man first, by aspect striketh a man hoarse.

925. Perfumes convenient do dry and strengthen the brain, and stay rheums and defluxions, as we find in fume of rosemary dried, and lignum aloes; and calamus taken at the mouth and nostrils: and no doubt there be other perfumes that do moisten and refresh, and are fit to be used in burning agues, consumptions, and too much wakefulness; such as are rose-water, vinegar, lemon-peels,

violets, the leaves of vines sprinkled with a little rose-water, etc.

926. They do use in sudden faintings and swoonings to put a handkerchief with rose-water or a little vinegar to the nose; which gathereth together again the spirits, which are upon point to resolve and fall away.

927. Tobacco comforteth the spirits, and dischargeth weariness, which it worketh partly by opening, but chiefly by the opiate virtue, which condenseth the spirits. It were good therefore to try the taking of fumes by pipes, as they do in tobacco, of other things; as well to dry and comfort, as for other intentions. I wish trial be made of the drying fume of rosemary, and lignum aloës, before-mentioned, in pipe; and so of nutmeg, and folium indum, etc.

928. The following of the plough hath been approved for refreshing the spirits and procuring appetite; but to do it in the ploughing for wheat or rye, is not so good, because the earth has spent her sweet breath in vegetables put forth in summer. It is better therefore to do it when you sow barley. But because ploughing is tied to seasons, it is best to take the air of the earth new turned up, by digging with the spade, or standing by him that diggeth. Gentlewomen may do themselves much good by kneeling upon a cushion, and weeding. And these things you may practise in the best seasons; which is ever the early spring, before the earth putteth forth the vegetables, and in the sweetest earth you can choose. It would be done also when the dew is a little off the ground, lest the vapour be too moist. I knew a great man that lived long, who had a clean clod of earth brought to him every morning as he sat in his bed; and he would hold his head over it a good pretty while. I commend also, sometimes, in digging of new earth, to pour in some Malmsey or Greek wine, that the vapour of the earth and wine together may comfort the spirits the more; provided always it be not taken for a heathen sacrifice, or libation to the earth.

929. They have in physic use of pomanders, and knots of powders, for drying of rheums, comforting of the heart, provoking of sleep, etc. For though those things be not

so strong as perfumes, yet you may have them continually in your hand; whereas perfumes you can take but at times: and besides, there be divers things that breathe better of themselves, than when they come to the fire; as nigella romana, the seed of melanthium, amomum, etc.

930. There be two things which, inwardly used, do cool and condense the spirits; and I wish the same to be tried outwardly in vapours. The one is nitre, which I would have dissolved in Malmsey, or Greek wine, and so the smell of the wine taken; or if you would have it more forcible, pour of it upon a firepan, well heated, as they do rose-water and vinegar. The other is the distilled water of wild poppy, which I wish to be mingled, at half, with rose-water, and so taken with some mixture of a few cloves in a perfuming-pan. The like would be done with the distilled water of saffron flowers.

931. Smells of musk, and amber, and civet, are thought to further venereous appetite; which they may do by the refreshing and calling forth of the spirits.

932. Incense and nidorous smells, such as were of sacrifices, were thought to intoxicate the brain, and to dispose men to devotion: which they may do by a kind of sadness, and contristation of the spirits: and partly also by heating and exalting them. We see that amongst the Jews the principal perfume of the sanctuary was forbidden all common uses.

933. There be some perfumes prescribed by the writers of natural magic, which procure pleasant dreams: and some others, as they say, that procure prophetical dreams; as the seeds of flax, flea-wort, etc.

934. It is certain, that odours do, in a small degree, nourish; especially the odour of wine: and we see men an hungered do love to smell hot bread. It is related that Democritus, when he lay a dying, heard a woman in the house complain, that she should be kept from being at a feast and solemnity, which she much desired to see, because there would be a corpse in the house; whereupon he caused loaves of new bread to be sent for, and opened them, and poured a little wine into them; and so kept himself alive with the odour of them, till the feast was past. I knew a gentleman that would fast,

sometimes three or four, yea, five days, without meat, bread, or drink; but the same man used to have continually a great wisp of herbs that he smelled on: and amongst those herbs, some esculent herbs of strong scent; as onions, garlic, leeks, and the like.

935. They do use, for the accident of the mother, to burn feathers and other things of ill odour: and by those ill smells the rising of the mother is put down.

936. There be airs which the physicians advise their patients to remove unto, in consumptions or upon recovery of long sicknesses: which, commonly, are plain champains, but grasing, and not over-grown with heath or the like; or else timber-shades, as in forests, and the like. It is noted also, that groves of bays do forbid pestilent airs; which was accounted a great cause of the wholesome air of Antiochia. There be also some soils that put forth odorate herbs of themselves; as wild thyme, wild marjoram, pennyroyal, camomile; and in which the brier roses smell almost like musk-roses; which, no doubt, are signs that do discover an excellent air.

937. It were good for men to think of having healthful air in their houses; which will never be if the rooms be low-roofed, or full of windows and doors; for the one maketh the air close, and not fresh, and the other maketh it exceeding unequal; which is a great enemy to health. The windows also should not be high up to the roof, which is in use for beauty and magnificence, but low. Also stone-walls are not wholesome; but timber is more wholesome; and especially brick: nay, it hath been used by some with great success to make their walls thick; and to put a lay of chalk between the bricks, to take away all dampishness.

Experiment solitary touching the emissions of spiritual species which affect the senses.

938. These emissions, as we said before, are handled, and ought to be handled by themselves under their proper titles: that is, visibles and audibles, each apart: in this place it shall suffice to give some general observations common to both. First, they seem to be incorporeal. Secondly, they work swiftly. Thirdly, they

work at large distances. Fourthly, in curious varieties. Fifthly, they are not effective of any thing; nor leave no work behind them; but are energies merely: for their working upon mirrours and places of echo doth not alter any thing in those bodies; but it is the same action with the original, only repercussed. And as for the shaking of windows, or rarifying the air by great noises; and the heat caused by burning-glasses, they are rather concomitants of the audible and visible species, than the effects of them. Sixthly, they seem to be of so tender and weak a nature, as they affect only such a rare and attenuate substance, as is the spirit of living creatures.

Experiments in consort touching the emission of immateriat virtues from the minds and spirits of men, either by affections, or by imaginations, or by other impressions.

939. It is mentioned in some stories, that where children have been exposed, or taken away young from their parents; and that afterwards they have approached to their parents presence, the parents, though they have not known them, have had a secret joy or other alteration thereupon.

940. There was an Egyptian soothsayer, that made Antonius believe, that his genius, which otherwise was brave and confident, was, in the presence of Octavianus Cæsar, poor and cowardly: and therefore he advised him, to absent himself as much as he could, and remove far from him. This soothsayer was thought to be suborned by Cleopatra, to make him live in Egypt, and other remote places from Rome. Howsoever the conceit of a predominant or mastering spirit of one man over another, is ancient, and received still, even in vulgar opinion.

941. There are conceits, that some men that are of an ill and melancholy nature, do incline the company into which they come to be sad and ill-disposed; and contrariwise, that others that are of a jovial nature, do dispose the company to be merry and cheerful. And again, that some men are lucky to be kept company with and employed; and others unlucky. Certainly, it

is agreeable to reason, that there are at the least some light effluxions from spirit to spirit, when men are in presence one with another, as well as from body to body.

942. It hath been observed, that old men who have loved young company, and been conversant continually with them, have been of long life; their spirits, as it seemeth, being recreated by such company. Such were the ancient sophists and rhetoricians; which ever had young auditors and disciples; as Gorgias, Protagoras, Isocrates, etc. who lived till they were an hundred years old. And so likewise did many of the grammarians and school-masters; such as was Orbilius, etc.

943. Audacity and confidence doth, in civil business, so great effects, as a man may reasonably doubt, that besides the very daring, and earnestness, and persisting, and importunity, there should be some secret binding, and stooping of other mens spirits to such persons.

944. The affections, no doubt, do make the spirits more powerful and active; and especially those affections which draw the spirits into the eyes: which are two; love, and envy, which is called *oculus malus*. As for love, the Platonists, some of them, go so far as to hold that the spirit of the lover doth pass into the spirits of the person loved; which causeth the desire of return into the body whence it was emitted: whereupon followeth that appetite of contact and conjunction which is in lovers. And this is observed likewise, that the aspects which procure love, are not gazings, but sudden glances and dartings of the eye. As for envy, that emitteth some malign and poisonous spirit, which taketh hold of the spirit of another; and is likewise of greatest force when the cast of the eye is oblique. It hath been noted also, that it is most dangerous when an envious eye is cast upon persons in glory, and triumph, and joy. The reason whereof is, for that at such times the spirits come forth most into the outward parts, and so meet the percussion of the envious eye more at hand: and therefore it hath been noted, that after great triumphs, men have been ill-disposed for some days following. We see the opinion of fascination is ancient, for both effects; of procuring love; and sickness caused by envy:

and fascination is ever by the eye. But yet if there be any such infection from spirit to spirit, there is no doubt but that it worketh by presence, and not by the eye alone; yet most forcibly by the eye.

945. Fear and shame are likewise infective; for we see that the starting of one will make another ready to start: and when one man is out of countenance in a company, others do likewise blush in his behalf.

Now we will speak of the force of imagination upon other bodies; and of the means to exalt and strengthen it. Imagination, in this place, I understand to be, the representation of an individual thought. Imagination is of three kinds: the first joined with belief of that which is to come; the second joined with memory of that which is past; and the third is of things present, or as if they were present; for I comprehend in this, imaginations feigned, and at pleasure; as if one should imagine such a man to be in the vestments of a Pope; or to have wings. I single out, for this time, that which is with faith or belief of that which is to come. The inquisition of this subject in our way, which is by induction, is wonderful hard: for the things that are reported are full of fables; and new experiments can hardly be made, but with extreme caution; for the reason which we will hereafter declare.

The power of imagination is of three kinds; the first upon the body of the imaginant, including likewise the child in the mother's womb; the second is, the power of it upon dead bodies, as plants, wood, stone, metal, etc. the third is, the power of it upon the spirits of men and living creatures: and with this last we will only meddle.

The problem therefore is, whether a man constantly and strongly believing that such a thing shall be, as that such an one will love him; or that such an one will grant him his request; or that such an one shall recover a sickness; or the like; it doth help any thing to the effecting of the thing itself. And here again we must warily distinguish; for it is not meant, as hath been partly said before, that it should help by making a man

more stout, or more industrious, in which kind a constant belief doth much, but merely by a secret operation, or binding, or changing the spirit of another: and in this it is hard, as we began to say, to make any new experiment; for I cannot command myself to believe what I will, and so no trial can be made. Nay, it is worse; for whatsoever a man imagineth doubtingly, or with fear, must needs do hurt, if imagination have any power at all; for a man representeth that oftener that he feareth, than the contrary.

The help therefore is, for a man to work by another, in whom he may create belief, and not by himself; until himself have found by experience, that imagination doth prevail; for then experience worketh in himself belief; if the belief that such a thing shall be, be joined with a belief that his imagination may procure it.

946. For example; I related one time to a man that was curious and vain enough in these things, that I saw a kind of juggler, that had a pair of cards, and would tell a man what card he thought. This pretended learned man told me, it was a mistaking in me; "for," said he, "it was not the knowledge of the man's thought, for that is proper to God, but it was the inforcing of a thought upon him, and binding his imagination by a stronger, that he could think no other card." And thereupon he asked me a question or two, which I thought he did but cunningly, knowing before what used to be the feats of the juggler. "Sir," said he, "do you remember whether he told the card the man thought, himself, or bade another to tell it?" I answered, as was true, that he bade another tell it. Whereunto he said, "So I thought: for," said he, "himself could not have put on so strong an imagination; but by telling the other the card, who believed that the juggler was some strange man, and could do strange things, that other man caught a strong imagination." I hearkened unto him, thinking for a vanity he spoke prettily. Then he asked me another question: saith he, "Do you remember, whether he bade the man think the card first, and afterwards told the other man in his ear what he should think; or else

that he did whisper first in the man's ear that should tell the card, telling that such a man should think such a card, and after bade the man think a card?" I told him, as was true; that he did first whisper the man in the ear, that such a man should think such a card: upon this the learned man did much exult and please himself, saying; "Lo, you may see that my opinion is right: for if the man had thought first, his thought had been fixed; but the other imagining first, bound his thought." Which though it did somewhat sink with me, yet I made it lighter than I thought, and said; I thought it was confederacy between the juggler and the two servants: though, indeed, I had no reason so to think, for they were both my father's servants; and he had never played in the house before. The juggler also did cause a garter to be held up; and took upon him to know, that such an one should point in such a place of the garter; as it should be near so many inches to the longer end, and so many to the shorter; and still he did it, by first telling the imaginer, and after bidding the actor think.

Having told this relation, not for the weight thereof, but because it doth handsomely open the nature of the question, I return to that I said; that experiments of imagination must be practised by others, and not by a man's self. For there be three means to fortify belief: the first is experience; the second is reason; and the third is authority: and that of these which is far the most potent, is authority; for belief upon reason, or experience, will stagger.

947. For authority, it is of two kinds; belief in an art; and belief in a man. And for things of belief in an art, a man may exercise them by himself; but for belief in a man, it must be by another. Therefore if a man believe in astrology, and find a figure prosperous; or believe in natural magic, and that a ring with such a stone, or such a piece of a living creature, carried, will do good; it may help his imagination: but the belief in a man is far the more active. But howsoever, all authority must be out of a man's self, turned, as was said, either upon an art, or upon a man: and where authority

is from one man to another, there the second must be ignorant, and not learned, or full of thoughts; and such are, for the most part, all witches and superstitious persons; whose beliefs, tied to their teachers and traditions, are no whit controlled either by reason or experience; and upon the same reason, in magic, they use for the most part boys and young people, whose spirits easiliest take belief and imagination.

Now to fortify imagination, there be three ways: the authority whence the belief is derived; means to quicken and corroborate the imagination; and means to repeat it and refresh it.

948. For the authority, we have already spoken: as for the second, namely, the means to quicken and corroborate the imagination; we see what hath been used in magic, if there be in those practices any thing that is purely natural, as vestments, characters, words, seals; some parts of plants, or living creatures; stones; choice of the hour; gestures and motions; also incenses and odours; choice of society, which increaseth imagination; diets and preparations for some time before. And for words, there have been ever used, either barbarous words, of no sense, lest they should disturb the imagination; or words of similitude, that may second and feed the imagination; and this was ever as well in heathen charms, as in charms of latter times. There are used also Scripture words; for that the belief that religious texts and words have power, may strengthen the imagination. And for the same reason, Hebrew words, which amongst us is counted the holy tongue, and the words more mystical, are often used.

949. For the refreshing of the imagination, which was the third means of exalting it, we see the practices of magic, as in images of wax, and the like, that should melt by little and little; or some other things buried in muck, that should putrify by little and little; or the like: for so oft as the imaginant doth think of those things, so oft doth he represent to his imagination the effect of that he desireth.

950. If there be any power in imagination, it is less credible that it should be so incorporeal, and immate-

riate a virtue, as to work at great distances, or through all mediums, or upon all bodies: but that the distance must be competent, the medium not adverse, and the body apt and proportionate. Therefore if there be any operation upon bodies in absence by nature, it is like to be conveyed from man to man, as fame is; as if a witch, by imagination, should hurt any afar off, it cannot be naturally: but by working upon the spirit of some that cometh to the witch; and from that party upon the imagination of another; and so upon another; till it come to one that hath resort to the party intended; and so by him to the party intended himself. And although they speak, that it sufficeth to make a point, or a piece of the garment, or the name of the party, or the like; yet there is less credit to be given to those things, except it be by working of evil spirits.

The experiments, which may certainly demonstrate the power of imagination upon other bodies, are few or none: for the experiments of witchcraft are no clear proofs; for that they may be by a tacit operation of malign spirits: we shall therefore be forced, in this inquiry, to resort to new experiments; wherein we can give only directions of trials, and not any positive experiments. And if any man think that we ought to have stayed till we had made experiment of some of them ourselves, as we do commonly in other titles, the truth is, that these effects of imagination upon other bodies have so little credit with us, as we shall try them at leisure; but in the mean time we will lead others the way.

951. When you work by the imagination of another, it is necessary that he, by whom you work, have a precedent opinion of you that you can do strange things; or that you are a man of art, as they call it; for else the simple affirmation to another, that this or that shall be, can work but a weak impression in his imagination.

952. It were good, because you cannot discern fully of the strength of imagination in one man more than another, that you did use the imagination of more than one, that so you may light upon a strong one. As if a

physician should tell three or four of his patient's servants, that their master shall surely recover.

953. The imagination of one that you shall use, such is the variety of mens minds, cannot be always alike constant and strong; and if the success follow not speedily, it will faint and lose strength. To remedy this, you must pretend to him, whose imagination you use, several degrees of means, by which to operate: as to prescribe him that every three days, if he find not the success apparent, he do use another root, or part of a beast or ring, etc. as being of more force; and if that fail, another; and if that, another, till seven times. Also you must prescribe a good large time for the effect you promise; as if you should tell a servant of a sick man that his master shall recover, but it will be fourteen days ere he findeth it apparently, etc. All this to entertain the imagination that it waver less.

954. It is certain, that potions, or things taken into the body; incenses and perfumes taken at the nostrils; and ointments of some parts, do naturally work upon the imagination of him that taketh them. And therefore it must needs greatly co-operate with the imagination of him whom you use, if you prescribe him, before he do use the receipt, for the work which he desireth, that he do take such a pill, or a spoonful of liquor; or burn such an incense; or anoint his temples, or the soles of his feet, with such an ointment or oil: and you must choose, for the composition of such pill, perfume, or ointment, such ingredients as do make the spirits a little more gross or muddy; whereby the imagination will fix the better.

955. The body passive, and to be wrought upon, I mean not of the imaginant, is better wrought upon, as hath been partly touched, at some times than at others: as if you should prescribe a servant about a sick person, whom you have possessed that his master shall recover, when his master is fast asleep, to use such a root, or such a root. For imagination is like to work better upon sleeping men, than men awake: as we shall shew when we handle dreams.

956. We find in the art of memory, that images vi-

sible work better than other conceits: as if you would remember the word philosophy, you shall more surely do it, by imagining, that such a man, for men are best places, is reading upon Aristotle's "Physics:" than if you should imagine him to say, "I'll go study philosophy." And therefore this observation would be translated to the subject we now speak of: for the more lustrous the imagination is, it filleth and fixeth the better. And therefore I conceive, that you shall, in that experiment, whereof we spake before, of binding of thoughts, less fail, if you tell one that such an one shall name one of twenty men, than if it were one of twenty cards. The experiment of binding of thoughts would be diversified and tried to the full: and you are to note, whether it hit for the most part, though not always.

957. It is good to consider, upon what things imagination hath most force: and the rule, as I conceive, is, that it hath most force upon things that have the lightest and easiest motions. And therefore above all, upon the spirits of men: and in them, upon such affections as move lightest; as upon procuring of love; binding of lust, which is ever with imagination; upon men in fear; or men in irresolution; and the like. Whatsoever is of this kind would be throughly inquired. Trials likewise would be made upon plants, and that diligently: as if you should tell a man, that such a tree would die this year; and will him at these and these times to go unto it, to see how it thriveth. As for inanimate things, it is true, that the motions of shuffling of cards, or casting of dice, are very light motions: and there is a folly very usual, that gamesters imagine, that some that stand by them bring them ill luck. There would be trial also made, of holding a ring by a thread in a glass, and telling him that holdeth it, before, that it shall strike so many times against the side of the glass, and no more; or of holding a key between two mens fingers, without a charm; and to tell those that hold it, that at such a name it shall go off their fingers: for these two are extreme light motions. And howsoever I have no opinion of these things, yet so much I conceive to be true; That strong imagination hath more force

upon things living, or that have been living, than things merely inanimate: and more force likewise upon light and subtile motions, than upon motions vehement or ponderous.

958. It is an usual observation, that if the body of one murdered be brought before the murderer, the wounds will bleed afresh. Some do affirm, that the dead body, upon the presence of the murderer, hath opened the eyes; and that there have been such like motions, as well where the parties murdered have been strangled or drowned, as where they have been killed by wounds. It may be, that this participateth of a miracle, by God's just judgment, who usually bringeth murders to light: but if it be natural, it must be referred to imagination.

959. The tying of the point upon the day of marriage, to make men impotent towards their wives, which, as we have formerly touched, is so frequent in Zant and Gascony, if it be natural, must be referred to the imagination of him that tieth the point. I conceive it to have the less affinity with witchcraft, because not peculiar persons only, such as witches are, but any body may do it.

Experiments in consort touching the secret virtue of sympathy and antipathy.

960. There be many things that work upon the spirits of man by secret sympathy and antipathy: the virtues of precious stones worn, have been anciently and generally received, and curiously assigned to work several effects. So much is true; that stones have in them fine spirits, as appeareth by their splendor; and therefore they may work by consent upon the spirits of men, to comfort and exhilarate them. Those that are the best, for that effect, are the diamond, the emerald, the hyacinth oriental, and the gold stone, which is the yellow topaz. As for their particular proprieties, there is no credit to be given to them. But it is manifest, that light, above all things, excelleth in comforting the spirits of men: and it is very probable, that light varied doth the same effect, with more novelty. And this is

one of the causes why precious stones comfort. And therefore it were good to have tincted lanthorns, or tincted screens, of glass coloured into green, blue, carnation, crimson, purple, etc. and to use them with candles in the light. So likewise to have round glasses, not only of glass coloured through, but with colours laid between crystals, with handles to hold in one's hand. Prisms are also comfortable things. They have of Paris-work, looking-glasses, bordered with broad borders of small crystal, and great counterfeit precious stones, of all colours, that are most glorious and pleasant to behold; especially in the night. The pictures of Indian feathers are likewise comfortable and pleasant to behold. So also fair and clear pools do greatly comfort the eyes and spirits, especially when the sun is not glaring, but over-cast; or when the moon shineth.

961. There be divers sorts of bracelets fit to comfort the spirits; and they be of three intentions; refrigerant, corroborant, and aperient. For refrigerant, I wish them to be of pearl, or of coral, as is used; and it hath been noted that coral, if the party that weareth it be indisposed, will wax pale; which I believe to be true, because otherwise distemper of heat will make coral lose colour. I commend also beads, or little plates of lapis lazuli; and beads of nitre, either alone, or with some cordial mixture.

962. For corroboration and confortation, take such bodies as are of astringent quality, without manifest cold. I commend bead-amber, which is full of astriction, but yet is unctuous, and not cold; and is conceived to impinguate those that wear such beads; I commend also beads of hartshorn and ivory; which are of the like nature; also orange beads; also beads of lignum aloës, macerated first in rose-water, and dried.

963. For opening, I commend beads, or pieces of the roots of carduus benedictus: also the roots of piony the male; and of orrice; and of calamus aromaticus; and of rue.

964. The cramp, no doubt, cometh of contraction of sinews; which is manifest, in that it cometh either by cold or dryness; as after consumptions, and long

agues; for cold and dryness do, both of them, contract and corrugate. We see also, that chafing a little above the place in pain, easeth the cramp; which is wrought by the dilatation of the contracted sinews by heat. There are in use, for the prevention of the cramp, two things; the one, rings of sea-horse teeth worn upon the fingers; the other, bands of green periwinkle, the herb, tied about the calf of the leg, or the thigh, etc. where the cramp useth to come. I do find this the more strange, because neither of these have any relaxing virtue, but rather the contrary. I judge therefore, that their working is rather upon the spirits, within the nerves, to make them strive less, than upon the bodily substance of the nerves.

965. I would have trial made of two other kinds of bracelets, for comforting the heart and spirits: the one of the trochisk of vipers, made into little pieces of beads; for since they do great good inwards, especially for pestilent agues, it is like they will be effectual outwards; where they may be applied in greater quantity. There would be trochisk likewise made of snakes; whose flesh dried is thought to have a very opening and cordial virtue. The other is, of beads made of the scarlet powder, which they call kermes; which is the principal ingredient in their cordial confection alkermes: the beads would be made up with ambergrease, and some pomander.

966. It hath been long received and confirmed by divers trials, that the root of the male-piony dried, tied to the neck, doth help the falling sickness; and likewise the incubus, which we call the mare. The cause of both these diseases, and especially of the epilepsy from the stomach, is the grossness of the vapours which rise and enter into the cells of the brain: and therefore the working is by extreme and subtile attenuation; which that simple hath. I judge the like to be in castoreum, musk, rue-seed, agnus castus seed, etc.

967. There is a stone which they call the blood-stone, which worn is thought to be good for them that bleed at the nose: which, no doubt, is by astriction and cooling of the spirits. *Query*, if the stone taken

out of the toad's head, be not of the like virtue; for the toad loveth shade and coolness.

968. Light may be taken from the experiment of the horse-tooth ring, and the garland of periwinkle, how that those things which assuage the strife of the spirits, do help diseases contrary to the intention desired: for in the curing of the cramp, the intention is to relax the sinews; but the contraction of the spirits, that they strive less, is the best help: so to procure easy travails of women, the intention is to bring down the child; but the best help is, to stay the coming down too fast: whereunto they say, the toad-stone likewise helpeth. So in pestilent fevers, the intention is to expel the infection by sweat and evaporation: but the best means to do it is by nitre, diascordium, and other cool things, which do for a time arrest the expulsion, till nature can do it more quietly. For as one saith prettily; "In the quenching of the flame of a pestilent ague, nature is like people that come to quench the fire of a house; which are so busy, as one of them letteth another." Surely it is an excellent axiom, and of manifold use, that whatsoever appeaseth the contention of the spirits, furthereth their action.

969. The writers of natural magic commend the wearing of the spoil of a snake, for preserving of health. I doubt it is but a conceit: for that the snake is thought to renew her youth, by casting her spoil. They might as well take the beak of an eagle, or a piece of a hart's horn, because those renew.

970. It hath been anciently received, for Pericles the Athenian used it, and it is yet in use, to wear little bladders of quicksilver, or tablets of arsenic, as preservatives against the plague: not as they conceive for any comfort they yield to the spirits, but for that being poisons themselves, they draw the venom to them from the spirits.

971. Vide the experiments 95, 96, and 97, touching the several sympathies and antipathies for medicinal use.

972. It is said, that the guts or skin of a wolf, being

applied to the belly, do cure the colic. It is true, that the wolf is a beast of great edacity and digestion; and so it may be the parts of him comfort the bowels.

973. We see scare-crows are set up to keep birds from corn and fruit; it is reported by some, that the head of a wolf, whole, dried, and hanged up in a dove-house, will scare away vermin; such as are weasles, pole-cats, and the like. It may be the head of a dog will do as much; for those vermin with us know dogs better than wolves.

974. The brains of some creatures, when their heads are roasted, taken in wine, are said to strengthen the memory; as the brains of hares, brains of hens, brains of deers, etc. And it seemeth to be incident to the brains of those creatures that are fearful.

975. The ointment that witches use, is reported to be made of the fat of children digged out of their graves; of the juices of smallage, wolf-bane, and cinque-foil, mingled with the meal of fine wheat. But I suppose, that the soporiferous medicines are likest to do it; which are henbane, hemlock, mandrake, moonshade, tobacco, opium, saffron, poplar leaves, etc.

976. It is reported by some, that the affections of beasts when they are in strength do add some virtue unto inanimate things; as that the skin of a sheep devoured by a wolf, moveth itching; that a stone bitten by a dog in anger, being thrown at him, drunk in powder, provoketh choler.

977. It hath been observed, that the diet of women with child doth work much upon the infant; as if the mother eat quinces much, and coriander-seed, the nature of both which is to repress and stay vapours that ascend to the brain, it will make the child ingenious; and on the contrary side, if the mother eat much onions or beans, or such vaporous food; or drink wine or strong drink immoderately; or fast much; or be given to much musing; all which send or draw vapours to the head; it endangereth the child to become lunatic, or of imperfect memory: and I make the same judgment of tobacco often taken by the mother.

978. The writers of natural magic report, that the heart of an ape, worn near the heart, comforteth the heart,

and increaseth audacity. It is true that the ape is a merry and bold beast. And that the same heart likewise of an ape, applied to the neck or head, helpeth the wit; and is good for the falling sickness: the ape also is a witty beast, and hath a dry brain; which may be some cause of attenuation of vapours in the head. Yet it is said to move dreams also. It may be the heart of a man would do more, but that it is more against mens minds to use it; except it be in such as wear the reliques of saints.

979. The flesh of a hedge-hog, dressed and eaten, is said to be a great drier: it is true that the juice of a hedge-hog must needs be harsh and dry, because it putteth forth so many prickles: for plants also that are full of prickles are generally dry; as briers, thorns, berberries; and therefore the ashes of an hedge-hog are said to be a great desiccative of fistulas.

980. Mummy hath great force in stanching of blood; which, as it may be ascribed to the mixture of balms that are glutinous; so it may also partake of a secret propriety, in that the blood draweth man's flesh. And it is approved that the moss which groweth upon the skull of a dead man unburied, will stanch blood potently: and so do the dregs, or powder of blood, severed from the water, and dried.

981. It hath been practised, to make white swallows, by anointing of the eggs with oil. Which effect may be produced, by the stopping of the pores of the shell, and making the juice that putteth forth the feathers afterwards more penurious. And it may be, the anointing of the eggs will be as effectual as the anointing of the body; of which *vide* the experiment 93.

982. It is reported, that the white of an egg, or blood, mingled with salt-water, doth gather the saltness, and maketh the water sweeter. This may be by adhesion; as in the sixth experiment of clarification: it may be also, that blood, and the white of an egg, which is the matter of a living creature, have some sympathy with salt: for all life hath a sympathy with salt. We see that salt laid to a cut finger healeth it; so as it seemeth salt draweth blood, as well as blood draweth salt.

983. It hath been anciently received, that the sea-hare

hath an antipathy with the lungs, if it cometh near the body, and erodeth them. Whereof the cause is conceived to be, a quality it hath of heating the breath and spirits; as cantharides have upon the watery parts of the body, as urine and hydropical water. And it is a good rule, that whatsoever hath an operation upon certain kinds of matters, that, in man's body, worketh most upon those parts wherein that kind of matter aboundeth.

984. Generally, that which is dead, or corrupted, or excerned, hath antipathy with the same thing when it is alive, and when it is sound; and with those parts which do excern: as a carcase of man is most infectious and odious to man; a carrion of an horse to an horse, etc. purulent matter of wounds, and ulcers, carbuncles, pocks, scabs, leprosy, to sound flesh; and the excrement of every species to that creature that excerneth them: but the excrements are less pernicious than the corruptions.

985. It is a common experience, that dogs know the dog-killer; when, as in times of infection, some petty fellow is sent out to kill the dogs; and that though they have never seen him before, yet they will all come forth, and bark, and fly at him.

986. The relations touching the force of imagination, and the secret instincts of nature, are so uncertain, as they require a great deal of examination ere we conclude upon them. I would have it first throughly inquired, whether there be any secret passages of sympathy between persons of near blood; as parents, children, brothers, sisters, nurse-children, husbands, wives, etc. There be many reports in history, that upon the death of persons of such nearness, men have had an inward feeling of it. I myself remember, that being in Paris, and my father dying in London, two or three days before my father's death, I had a dream, which I told to divers English gentlemen, that my father's house in the country was plaistered all over with black mortar. There is an opinion abroad, whether idle or no I cannot say, that loving and kind husbands have a sense of their wives breeding child, by some accident in their own body.

987. Next to those that are near in blood, there may be the like passage, and instincts of nature, between great

friends and enemies: and sometimes the revealing is unto another person, and not to the party himself. I remember Philippus Commineus, a grave writer, reporteth, that the archbishop of Vienna, a reverend prelate, said one day after mass to king Lewis the eleventh of France: "Sir, your mortal enemy is dead;" what time duke Charles of Burgundy was slain at the battle of Granson against the Switzers. Some trial also would be made, whether pact or agreement do any thing; as if two friends should agree, that such a day in every week, they, being in far distant places, should pray one for another; or should put on a ring or tablet one for another's sake; whether if one of them should break their vow and promise, the other should have any feeling of it in absence.

988. If there be any force in imaginations and affections of singular persons, it is probable the force is much more in the joint imaginations and affections of multitudes: as if a victory should be won or lost in remote parts, whether is there not some sense thereof in the people whom it concerneth; because of the great joy or grief that many men are possessed with at once? Pius Quintus, at the very time when that memorable victory was won by the Christians against the Turks, at the naval battle of Lepanto, being then hearing of causes in consistory, brake off suddenly, and said to those about him, "It is now more time we should give thanks to God, for the great victory he hath granted us against the Turks:" it is true, that victory had a sympathy with his spirit; for it was merely his work to conclude that league. It may be that revelation was divine; but what shall we say then to a number of examples amongst the Grecians and Romans? where the people being in theatres at plays, have had news of victories and overthrows, some few days before any messenger could come.

It is true, that that may hold in these things, which is the general root of superstition: namely, that men observe when things hit, and not when they miss; and commit to memory the one, and forget and pass over the other. But touching divination, and the misgiving of minds, we shall speak more when we handle in general the nature of minds, and souls, and spirits.

989. We have given formerly some rules of imagination; and touching the fortifying of the same. We have set down also some few instances and directions, of the force of imagination upon beasts, birds, etc. upon plants, and upon inanimate bodies: wherein you must still observe, that your trials be upon subtle and light motions, and not the contrary; for you will sooner by imagination bind a bird from singing than from eating or flying: and I leave it to every man to choose experiments which himself thinketh most commodious; giving now but a few examples of every of the three kinds.

990. Use some imaginant, observing the rules formerly prescribed, for binding of a bird from singing; and the like of a dog from barking. Try also the imagination of some, whom you shall accommodate with things to fortify it, in cock-fights, to make one cock more hardy, and the other more cowardly. It would be tried also in flying of hawks, or in coursing of a deer, or hare, with greyhounds: or in horse races; and the like comparative motions: for you may sooner by imagination quicken or slack a motion, than raise or cease it; as it is easier to make a dog go slower, than to make him stand still, that he may not run.

991. In plants also you may try the force of imagination upon the lighter sort of motions: as upon the sudden fading, or lively coming up of herbs; or upon their bending one way or other; or upon their closing and opening, etc.

992. For inanimate things, you may try the force of imagination, upon staying the working of beer when the barm is put in; or upon the coming of butter or cheese, after the churning, or the rennet be put in.

993. It is an ancient tradition every where alledged, for example of secret proprieties and influxes, that the torpedo marina, if it be touched with a long stick, doth stupify the hand of him that toucheth it. It is one degree of working at a distance, to work by the continuance of a fit medium; as sound will be conveyed to the ear by striking upon a bow-string, if the horn of the bow be held to the ear.

994. The writers of natural magic do attribute much to the virtues that come from the parts of living crea-

tures; so as they be taken from them, the creatures remaining still alive: as if the creatures still living did infuse some immateriate virtue and vigour into the part severed. So much may be true; that any part taken from a living creature newly slain, may be of greater force than if it were taken from the like creature dying of itself, because it is fuller of spirit.

995. Trial would be made of the like parts of individuals in plants and living creatures; as to cut off a stock of a tree, and to lay that which you cut off to putrify, to see whether it will decay the rest of the stock: or if you should cut off part of the tail or leg of a dog or a cat, and lay it to putrify, and so see whether it will fester, or keep from healing, the part which remaineth.

996. It is received, that it helpeth to continue love, if one wear a ring, or a bracelet, of the hair of the party beloved. But that may be by the exciting of the imagination: and perhaps a glove, or other like favour, may as well do it.

997. The sympathy of individuals, that have been entire, or have touched, is of all others the most incredible; yet according unto our faithful manner of examination of nature, we will make some little mention of it. The taking away of warts by rubbing them with somewhat that afterwards is put to waste and consume, is a common experiment; and I do apprehend it the rather because of my own experience. I had from my childhood a wart upon one of my fingers: afterwards, when I was about sixteen years old, being then at Paris, there grew upon both my hands a number of warts, at the least an hundred, in a month's space. The English ambassador's lady, who was a woman far from superstition, told me one day, she would help me away with my warts: whereupon she got a piece of lard with the skin on, and rubbed the warts all over with the fat side; and amongst the rest, that wart which I had had from my childhood: then she nailed the piece of lard, with the fat towards the sun, upon a post of her chamber window, which was to the south. The success was, that within five weeks space all the warts went quite away: and that wart which I had so long

endured, for company. But at the rest I did little marvel, because they came in a short time, and might go away in a short time again: but the going away of that which had stayed so long doth yet stick with me. They say the like is done by the rubbing of warts with a green elder stick, and then burying the stick to rot in muck. It would be tried with corns and wens, and such other excrescences. I would have it also tried with some parts of living creatures that are nearest the nature of excrescences; as the combs of cocks, the spurs of cocks, the horns of beasts, etc. And I would have it tried both ways; both by rubbing those parts with lard, or elder, as before; and by cutting off some piece of those parts, and laying it to consume: to see whether it will work any effect towards the consumption of that part which was once joined with it.

998. It is constantly received and avouched, that the anointing of the weapon that maketh the wound, will heal the wound itself. In this experiment, upon the relation of men of credit, though myself, as yet, am not fully inclined to believe it, you shall note the points following: first, the ointment wherewith this is done is made of divers ingredients; whereof the strangest and hardest to come by, are the moss upon the skull of a dead man unburied; and the fats of a boar and a bear killed in the act of generation. These two last I could easily suspect to be prescribed as a starting-hole; that if the experiment proved not, it might be pretended that the beasts were not killed in the due time; for as for the moss, it is certain there is great quantity of it in Ireland, upon slain bodies, laid on heaps unburied. The other ingredients are, the blood-stone in powder, and some other things, which seem to have a virtue to stanch blood; as also the moss hath. And the description of the whole ointment is to be found in the chemical dispensatory of Crollius. Secondly, the same kind of ointment applied to the hurt itself worketh not the effect; but only applied to the weapon. Thirdly, which I like well, they do not observe the confecting of the ointment under any certain constellation; which commonly is the excuse of magical medicines when they

fail, that they were not made under a fit figure of heaven. Fourthly, it may be applied to the weapon, though the party hurt be at great distance. Fifthly, it seemeth the imagination of the party to be cured is not needful to concur; for it may be done without the knowledge of the party wounded: and thus much has been tried, that the ointment, for experiment's sake, hath been wiped off the weapon, without the knowledge of the party hurt, and presently the party hurt has been in great rage of pain, till the weapon was reanointed. Sixthly, it is affirmed, that if you cannot get the weapon, yet if you put an instrument of iron or wood, resembling the weapon, into the wound, whereby it bleedeth, the anointing of that instrument will serve and work the effect. This I doubt should be a device to keep this strange form of cure in request and use: because many times you cannot come by the weapon itself. Seventhly, the wound must be at first washed clean with white wine, or the party's own water; and then bound up close in fine linen, and no more dressing renewed till it be whole. Eighthly, the sword itself must be wrapped up close, as far as the ointment goeth, that it taketh no wind. Ninthly, the ointment, if you wipe it off from the sword and keep it, will serve again; and rather increase in virtue than diminish. Tenthly, it will cure in far shorter time than ointments of wounds commonly do. Lastly, it will cure a beast as well as a man; which I like best of all the rest, because it subjecteth the matter to an easy trial.

Experiment solitary touching secret proprieties.

999. I would have men know, that though I reprehend the easy passing over the causes of things, by ascribing them to secret and hidden virtues, and proprieties, for this hath arrested and laid asleep all true inquiry and indications, yet I do not understand, but that in the practical part of knowledge, much will be left to experience and probation, whereunto indication cannot so fully reach; and this not only in *specie*, but in *individuo*. So in physic; if you will cure the jaun-

dice, it is not enough to say, that the medicine must not be cooling; for that will hinder the opening which the disease requireth: that it must not be hot; for that will exasperate choler: that it must go to the gall; for there is the obstruction which causeth the disease, etc. But you must receive from experience that powder of Chamæpytis, or the like, drunk in beer, is good for the jaundice. So again a wise physician doth not continue still the same medicine to a patient; but he will vary, if the first medicine doth not apparently succeed: for of those remedies that are good for the jaundice, stone, agues, etc. that will do good in one body which will not do good in another; according to the correspondence the medicine hath to the individual body.

Experiment solitary touching the general sympathy of mens spirits.

1000. The delight which men have in popularity, fame, honour, submission, and subjection of other mens minds, wills, or affections, although these things may be desired for other ends, seemeth to be a thing in itself, without contemplation of consequence, grateful and agreeable to the nature of man. This thing, surely, is not without some signification, as if all spirits and souls of men came forth out of one divine limbus; else why should men be so much affected with that which others think or say? The best temper of minds desireth good name and true honour: the lighter, popularity and applause: the more depraved, subjection and tyranny; as is seen in great conquerors and troublers of the world: and yet more in arch-heretics; for the introducing of new doctrines is likewise an affectation of tyranny over the understandings and beliefs of men.

NEW ATLANTIS.

A WORK UNFINISHED.

TO

THE READER.

This fable my lord devised, to the end that he might exhibit therein a model or description of a college, instituted for the interpreting of nature, and the producing of great and marvellous works, for the benefit of men; under the name of Solomon's house, or the College of the six days works. And even so far his lordship hath proceeded, as to finish that part. Certainly the model is more vast and high, than can possibly be imitated in all things; notwithstanding most things therein are within mens power to effect. His lordship thought also in this present fable, to have composed a frame of laws, or of the best state or mould of a commonwealth; but foreseeing it would be a long work, his desire of collecting the Natural History diverted him, which he preferred many degrees before it.

This work of the *New Atlantis*, as much as concerneth the English edition, his lordship designed for this place; in regard it hath so near affinity, in one part of it, with the preceding Natural History.

W. RAWLEY.

NEW ATLANTIS.

We sailed from Peru, where we had continued by the space of one whole year, for China and Japan, by the South Sea, taking with us victuals for twelve months; and had good winds from the east, though soft and weak, for five months space and more. But then the wind came about, and settled in the west for many days, so as we could make little or no way, and were sometimes in purpose to turn back. But then again there arose strong and great winds from the south, with a point east, which carried us up, for all that we could do, towards the north: by which time our victuals failed us, though we had made good spare of them. So that finding ourselves in the midst of the greatest wilderness of waters in the world, without victual, we gave ourselves for lost men, and prepared for death. Yet we did lift up our hearts and voices to God above, who sheweth "his wonders in the deep;" beseeching him of his mercy, that as in the beginning he discovered the face of the deep, and brought forth dry land; so he would now discover land to us, that we might not perish. And it came to pass, that the next day about evening, we saw within a kenning before us, towards the north, as it were thick clouds, which did put us in some hope of land; knowing how that part of the South Sea was utterly unknown; and might have islands or continents, that hitherto were not come to light. Wherefore we bent our course thither, where we saw the appearance of land all that night; and in the dawning of the next day, we might plainly discern that it was a land, flat to our sight, and full of boscage, which made it shew the more dark. And after an hour and a half's sailing, we entered into a good haven, being the port of a fair city; not great indeed, but well built, and that gave a pleasant view from the sea; and we thinking every mi-

nute long till we were on land, came close to the shore, and offered to land. But straightways we saw divers of the people with batons in their hands, as it were, forbidding us to land; yet without any cries or fierceness, but only as warning us off by signs that they made. Whereupon being not a little discomforted, we were advising with ourselves what we should do. During which time there made forth to us a small boat, with about eight persons in it; whereof one of them had in his hand a tipstaff of a yellow cane, tipped at both ends with blue, who came aboard our ship, without any shew of distrust at all. And when he saw one of our number present himself somewhat afore the rest, he drew forth a little scroll of parchment, somewhat yellower than our parchment, and shining like the leaves of writing-tables, but otherwise soft and flexible, and delivered it to our foremost man. In which scroll were written in ancient Hebrew, and in ancient Greek, and in good Latin of the school, and in Spanish, these words; "Land ye not, none of you, and provide to be gone from this coast within sixteen days, except you have further time given you: mean while, if you want fresh water, or victual, or help for your sick, or that your ship needeth repair, write down your wants, and you shall have that which belongeth to mercy." This scroll was signed with a stamp of cherubims wings, not spread, but hanging downwards, and by them a cross. This being delivered, the officer returned, and left only a servant with us to receive our answer. Consulting hereupon amongst ourselves, we were much perplexed. The denial of landing, and hasty warning us away, troubled us much; on the other side, to find that the people had languages, and were so full of humanity, did comfort us not a little. And above all, the sign of the cross to that instrument was to us a great rejoicing, and as it were a certain presage of good. Our answer was in the Spanish tongue; "That for our ship, it was well; for we had rather met with calms and contrary winds than any tempests. For our sick, they were many, and in very ill case; so that if they were not permitted to land, they ran in danger of their lives."

Our other wants we set down in particular; adding, "that we had some little store of merchandise, which if it pleased them to deal for, it might supply our wants without being chargeable unto them." We offered some reward in pistolets unto the servant, and a piece of crimson velvet to be presented to the officer; but the servant took them not, nor would scarce look upon them; and so left us, and went back in another little boat which was sent for him.

About three hours after we had dispatched our answer, there came towards us a person, as it seemed, of place. He had on him a gown with wide sleeves, of a kind of water-chamblet, of an excellent azure colour, far more glossy than ours; his under apparel was green, and so was his hat, being in the form of a turban, daintily made, and not so huge as the Turkish turbans; and the locks of his hair came down below the brims of it. A reverend man was he to behold. He came in a boat, gilt in some part of it, with four persons more only in that boat; and was followed by another boat, wherein were some twenty. When he was come within a flight shot of our ship, signs were made to us, that we should send forth some to meet him upon the water, which we presently did in our ship-boat, sending the principal man amongst us save one, and four of our number with him. When we were come within six yards of their boat, they called to us to stay, and not to approach farther; which we did. And thereupon the man, whom I before described, stood up, and with a loud voice in Spanish, asked "Are ye Christians?" We answered, "we were;" fearing the less, because of the cross we had seen in the subscription. At which answer the said person lift up his right hand towards heaven, and drew it softly to his mouth, which is the gesture they use when they thank God, and then said: "If ye will swear, all of you, by the merits of the Saviour, that ye are no pirates; nor have shed blood lawfully nor unlawfully within forty days past; you may have licence to come on land." We said, "we were all ready to take that oath." Whereupon one of those that were with him, being, as it seemed, a notary, made entry of this act. Which done, another of the attendants of the great per-

son, which was with him in the same boat, after his lord had spoken a little to him, said aloud; "My lord would have you know, that it is not of pride or greatness, that he cometh not aboard your ship; but for that in your answer you declare, that you have many sick amongst you, he was warned by the conservator of health of the city, that he should keep a distance." We bowed ourselves towards him and answered, "we were his humble servants; and accounted for great honour, and singular humanity towards us, that which was already done; but hoped well, that the nature of the sickness of our men was not infectious." So he returned; and a while after came the notary to us aboard our ship; holding in his hand a fruit of that country, like an orange, but of colour between orange-tawny and scarlet, which cast a most excellent odour. He used it, as it seemeth, for a preservative against infection. He gave us our oath; "By the name of Jesus and his merits:" and after told us, that the next day by six of the clock in the morning we should be sent to, and brought to the Strangers house, so he called it, where we should be accommodated of things, both for our whole, and for our sick. So he left us; and when we offered him some pistolets, he smiling, said, "he must not be twice paid for one labour:" meaning, as I take it, tha the had a salary sufficient of the state for his service. For, as I after learned, they call an officer that taketh rewards, Twice-paid.

The next morning early, there came to us the same officer that came to us at first with his cane, and told us, "he came to conduct us to the Strangers house; and that he had prevented the hour, because we might have the whole day before us for our business. For," said he, "if you will follow my advice, there shall first go with me, some few of you, and see the place, and how it may be made convenient for you; and then you may send for your sick, and the rest of your number, which we will bring on land." We thanked him, and said, that this care, which he took of desolate strangers, God would reward. And so six of us went on land with him: and when we were on land, he went before us, and turned to us, and said, "he was but our

servant, and our guide." He led us through three fair streets; and all the way we went there were gathered some people on both sides, standing in a row; but in so civil a fashion, as if it had been, not to wonder at us, but to welcome us; and divers of them, as we passed by them, put their arms a little abroad; which is their gesture when they bid any welcome. The Strangers house is a fair and spacious house, built of brick, of somewhat a bluer colour than our brick; and with handsome windows, some of glass, some of a kind of cambric oiled. He brought us first into a fair parlour above stairs, and then asked us, "What number of persons we were? And how many sick?" We answered, "we were in all, sick and whole, one and fifty persons, whereof our sick were seventeen." He desired us to have patience a little, and to stay till he came back to us, which was about an hour after; and then he led us to see the chambers, which were provided for us, being in number nineteen: they having cast it, as it seemeth, that four of those chambers, which were better than the rest, might receive four of the principal men of our company, and lodge them alone by themselves; and the other fifteen chambers, were to lodge us two and two together. The chambers were handsome and chearful chambers, and furnished civilly. Then he led us to a long gallery, like a dorture, where he shewed us all along the one side, for the other side was but wall and window, seventeen cells, very neat ones, having partitions of cedar wood. Which gallery and cells, being in all forty, many more than we needed, were instituted as an infirmary for sick persons. And he told us withal, that as any of our sick waxed well, he might be removed from his cell to a chamber: for which purpose there were set forth ten spare chambers, besides the number we spake of before. This done, he brought us back to the parlour, and lifting up his cane a little, as they do when they give any charge or command, said to us, "Ye are to know that the custom of the land requireth, that after this day and to-morrow, which we give you for removing of your people from your ship, you are to keep within doors for three days. But let it not trouble

you, nor do not think yourselves restrained, but rather left to your rest and ease. You shall want nothing, and there are six of our people appointed to attend you, for any business you may have abroad." We gave him thanks, with all affection and respect, and said, "God surely is manifested in this land." We offered him also twenty pistolets; but he smiled, and only said; "What? twice paid!" And so he left us. Soon after our dinner was served in; which was right good viands, both for bread and meat: better than any collegiate diet that I have known in Europe. We had also drink of three sorts, all wholesome and good; wine of the grape; a drink of grain, such as is with us our ale, but more clear; and a kind of cider made of a fruit of that country; a wonderful pleasing and refreshing drink. Besides, there were brought in to us great store of those scarlet oranges for our sick: which, they said, were an assured remedy for sickness taken at sea. There was given us also a box of small grey or whitish pills, which they wished our sick should take, one of the pills every night before sleep; which, they said, would hasten their recovery. The next day, after that our trouble of carriage, and removing of our men, and goods out of our ship, was somewhat settled and quiet, I thought good to call our company together; and when they were assembled said unto them; "My dear friends, let us know ourselves, and how it standeth with us. We are men cast on land, as Jonas was, out of the whale's belly, when we were as buried in the deep: and now we are on land, we are but between death and life; for we are beyond both the old world and the new; and whether ever we shall see Europe, God only knoweth. It is a kind of miracle hath brought us hither: and it must be little less that shall bring us hence. Therefore in regard of our deliverance past, and our danger present and to come, let us look up to God, and every man reform his own ways. Besides we are come here amongst a Christian people, full of piety and humanity: let us not bring that confusion of face upon ourselves, as to shew our vices or unworthiness before them. Yet there is more: for they have by commandment, though

in form of courtesy, cloistered us within these walls for three days: who knoweth whether it be not to take some taste of our manners and conditions? And if they find them bad, to banish us straightways; if good, to give us farther time. For these men, that they have given us for attendance, may withal have an eye upon us. Therefore for God's love, and as we love the weal of our souls and bodies, let us so behave ourselves as we may be at peace with God, and may find grace in the eyes of this people." Our company with one voice thanked me for my good admonition, and promised me to live soberly and civilly, and without giving any the least occasion of offence. So we spent our three days joyfully, and without care, in expectation what would be done with us when they were expired. During which time, we had every hour joy of the amendment of our sick; who thought themselves cast into some divine pool of healing; they mended so kindly and so fast.

The morrow after our three days were past, there came to us a new man, that we had not seen before, clothed in blue as the former was, save that his turban was white, with a small red cross on the top. He had also a tippet of fine linen. At his coming in he did bend to us a little, and put his arms abroad. We of our parts saluted him in a very lowly and submissive manner; as looking that from him we should receive sentence of life or death. He desired to speak with some few of us: whereupon six of us only stayed, and the rest avoided the room. He said, "I am by office governor of this House of Strangers, and by vocation I am a Christian priest; and therefore am come to you, to offer you my service, both as strangers, and chiefly as Christians. Some things I may tell you, which I think you will not be unwilling to hear. The state hath given you licence to stay on land for the space of six weeks: and let it not trouble you if your occasions ask farther time, for the law in this point is not precise; and I do not doubt but myself shall be able to obtain for you such farther time as may be convenient. Ye shall also understand, that the Strangers house is at this time rich, and much aforehand; for it hath laid

up revenue these thirty-seven years; for so long it is since any stranger arrived in this part: and therefore take ye no care; the state will defray you all the time you stay; neither shall you stay one day the less for that. As for any merchandise you have brought, ye shall be well used, and have your return either in merchandise, or in gold and silver: for to us it is all one. And if you have any other request to make, hide it not. For ye shall find, we will not make your countenance to fall by the answer ye shall receive. Only this I must tell you, that none of you must go above a *karan*," that is with them a mile and an half, "from the walls of the city without special leave." We answered, after we had looked awhile one upon another, admiring this gracious and parent-like usage; "that we could not tell what to say: for we wanted words to express our thanks; and his noble free offers left us nothing to ask. It seemed to us, that we had before us a picture of our salvation in heaven: for we that were awhile since in the jaws of death, were now brought into a place where we found nothing but consolations. For the commandment laid upon us, we would not fail to obey it, though it was impossible but our hearts should be inflamed to tread farther upon this happy and holy ground." We added; "that our tongues should first cleave to the roofs of our mouths, ere we should forget either his reverend person, or this whole nation in our prayers." We also most humbly besought him to accept of us as his true servants, by as just a right as ever men on earth were bounden, laying and presenting both our persons and all we had at his feet. He said; "he was a priest, and looked for a priest's reward; which was our brotherly love, and the good of our souls and bodies." So he went from us, not without tears of tenderness in his eyes; and left us also confused with joy and kindness, saying amongst ourselves, "that we were come into a land of angels, which did appear to us daily, and prevent us with comforts which we thought not of, much less expected."

The next day, about ten of the clock, the governor came to us again, and after salutations said familiarly,

that he was come to visit us; and called for a chair, and sat him down: and we being some ten of us, the rest were of the meaner sort, or else gone abroad, sat down with him. And when we were set, he began thus: "We of this island of Bensalem," for so they call it in their language, "have this; that by means of our solitary situation, and of the laws of secrecy which we have for our travellers, and our rare admission of strangers; we know well most part of the habitable world, and are ourselves unknown. Therefore because he that knoweth least is fittest to ask questions, it is more reason for the entertainment of the time, that ye ask me questions, than that I ask you." We answered; "That we humbly thanked him that he would give us leave so to do: and that we conceived by the taste we had already, that there was no worldly thing on earth more worthy to be known than the state of that happy land. But above all," we said, "since that we were met from the several ends of the world, and hoped assuredly that we should meet one day in the kingdom of heaven, for that we were both parts Christians, we desired to know, in respect that land was so remote, and so divided by vast and unknown seas, from the land where our Saviour walked on earth, who was the apostle of that nation, and how it was converted to the faith?" It appeared in his face that he took great contentment in this our question: he said, "Ye knit my heart to you, by asking this question in the first place; for it sheweth that you 'first seek the kingdom of heaven;' and I shall gladly and briefly satisfy your demand.

"About twenty years after the ascension of our Saviour, it came to pass, that there was seen by the people of Renfusa, a city upon the eastern coast of our island, within night, the night was cloudy and calm, as it might be some mile into the sea, a great pillar of light; not sharp, but in form of a column or cylinder rising from the sea, a great way up towards heaven: and on the top of it was seen a large cross of light, more bright and resplendent than the body of the pillar. Upon which so strange a spectacle, the people of the city gathered apace together upon the sands to wonder;

and so after put themselves into a number of small boats, to go nearer to this marvellous sight. But when the boats were come within about sixty yards of the pillar, they found themselves all bound, and could go no farther, yet so as they might move to go about, but might not approach nearer: so as the boats stood all as in a theatre, beholding this light as an heavenly sign. It so fell out, that there was in one of the boats one of the wise men of the society of Solomon's house, which house or college, my good brethren, is the very eye of this kingdom; who having awhile attentively and devoutly viewed and contemplated this pillar and cross, fell down upon his face; and then raising himself upon his knees, and lifting up his hands to heaven, made his prayers in this manner:

"'Lord God of heaven and earth; thou hast vouchsafed of thy grace, to those of our order, to know thy works of creation, and the secrets of them; and to discern, as far as appertaineth to the generations of men, between divine miracles, works of nature, works of art, and impostures and illusions of all sorts. I do here acknowledge and testify before this people, that the thing which we now see before our eyes, is thy finger, and a true miracle; and forasmuch as we learn in our books, that thou never workest miracles, but to a divine and excellent end, for the laws of nature are thine own laws, and thou exceedest them not but upon great cause, we most humbly beseech thee to prosper this great sign, and to give us the interpretation and use of it in mercy; which thou dost in some part secretly promise by sending it unto us.'

"When he had made his prayer, he presently found the boat he was in moveable and unbound; whereas all the rest remained still fast; and taking that for an assurance of leave to approach, he caused the boat to be softly and with silence rowed towards the pillar. But ere he came near it, the pillar and cross of light brake up, and cast itself abroad, as it were into a firmament of many stars; which also vanished soon after, and there was nothing left to be seen but a small ark or chest of cedar, dry, and not wet at all with water, though it swam. And

in the fore-end of it which was towards him, grew a small green branch of palm; and when the wise man had taken it with all reverence into his boat, it opened of itself, and there were found in it a book and a letter; both written in fine parchment, and wrapped in sindons of linen. The book contained all the canonical books of the Old and New Testament, according as you have them, for we know well what the Churches with you receive, and the Apocalypse itself: and some other books of the New Testament, which were not at that time written, were nevertheless in the book: and for the letter it was in these words:

"'I Bartholomew, a servant of the Highest, and Apostle of Jesus Christ, was warned by an angel that appeared to me in a vision of glory, that I should commit this ark to the floods of the sea. Therefore I do testify and declare, unto that people where God shall ordain this ark to come to land, that in the same day is come unto them salvation, and peace, and good-will, from the Father, and from the Lord Jesus.'

"There was also in both these writings, as well the book as the letter, wrought a great miracle, conform to that of the Apostles in the original gift of tongues. For there being at that time in this land, Hebrews, Persians, and Indians, besides the natives, every one read upon the book and letter, as if they had been written in his own language. And thus was this land saved from infidelity, as the remain of the old world was from water, by an ark, through the apostolical and miraculous evangelism of St. Bartholomew." And here he paused, and a messenger came, and called him from us. So this was all that passed in that conference.

The next day the same governor came again to us immediately after dinner, and excused himself, saying; "that the day before he was called from us somewhat abruptly, but now he would make us amends, and spend time with us, if we held his company and conference agreeable:" We answered, "that we held it so agreeable and pleasing to us, as we forgot both dangers past and fears to come, for the time we heard him speak; and that we thought an hour spent with him, was worth years of

our former life." He bowed himself a little to us, and after we were set again, he said; "Well, the questions are on your part." One of our number said, after a little pause; "that there was a matter we were no less desirous to know, than fearful to ask, lest we might presume too far. But encouraged by his rare humanity towards us, that could scarce think ourselves strangers, being his vowed and professed servants, we would take the hardiness to propound it: humbly beseeching him, if he thought it not fit to be answered, that he would pardon it, though he rejected it." We said; "we well observed those his words, which he formerly spake, that this happy island where we now stood, was known to few, and yet knew most of the nations of the world; which we found to be true, considering they had the languages of Europe, and knew much of our state and business; and yet we in Europe, notwithstanding all the remote discoveries and navigations of this last age, never heard any of the least inkling or glimpse of this island. This we found wonderful strange; for that all nations have interknowledge one of another, either by voyage into foreign parts, or by strangers that come to them: and though the traveller into a foreign country doth commonly know more by the eye, than he that stayeth at home can by relation of the traveller; yet both ways suffice to make a mutual knowledge, in some degree, on both parts. But for this island, we never heard tell of any ship of theirs, that had been seen to arrive upon any shore of Europe; no, nor of either the East or West Indies, nor yet of any ship of any other part of the world, that had made return from them. And yet the marvel rested not in this. For the situation of it, as his lordship said, in the secret conclave of such a vast sea might cause it. But then, that they should have knowledge of the languages, books, affairs, of those that lie at such a distance from them, it was a thing we could not tell what to make of; for that it seemed to us a condition and propriety of divine powers and beings, to be hidden and unseen to others, and yet to have others open, and as in a light to them." At this speech the governor gave a gracious smile, and said; "that we did well to ask pardon for this question we now asked; for that it

imported, as if we thought this land a land of magicians, that sent forth spirits of the air into all parts, to bring them news and intelligence of other countries." It was answered by us all, in all possible humbleness, but yet with a countenance taking knowledge that we knew that he spake it but merrily, "That we were apt enough to think there was something supernatural in this island, but yet rather as angelical than magical. But to let his lordship know truly, what it was that made us tender and doubtful to ask this question, it was not any such conceit, but because we remembered, he had given a touch in his former speech, that this land had laws of secrecy touching strangers." To this he said; "You remember it aright; and therefore in that I shall say to you, I must reserve some particulars, which it is not lawful for me to reveal; but there will be enough left to give you satisfaction.

"You shall understand, that which perhaps you will scarce think credible, that about three thousand years ago, or somewhat more, the navigation of the world, especially for remote voyages, was greater than at this day. Do not think with yourselves, that I know not how much it is increased with you within these six-score years: I know it well; and yet I say greater then than now: whether it was, that the example of the ark, that saved the remnant of men from the universal deluge, gave men confidence to adventure upon the waters, or what it was, but such is the truth. The Phœnicians, and especially the Tyrians, had great fleets. So had the Carthaginians their colony, which is yet farther west. Toward the east, the shipping of Egypt, and of Palestine, was likewise great. China also, and the great Atlantis, that you call America, which have now but junks and canoes, abounded then in tall ships. This island, as appeareth by faithful registers of those times, had then fifteen hundred strong ships, of great content. Of all this there is with you sparing memory, or none; but we have large knowledge thereof.

"At that time, this land was known and frequented by the ships and vessels of all the nations before named. And, as it cometh to pass, they had many times men of other countries, that were no sailors, that came with them;

as Persians, Chaldeans, Arabians, so as almost all nations of might and fame resorted hither; of whom we have some strips and little tribes with us at this day. And for our own ships, they went sundry voyages, as well to your Straits, which you call the pillars of Hercules, as to other parts in the Atlantic and Mediterranean Seas; as to Peguin, which is the same with Cambaline, and Quinzy, upon the Oriental Seas, as far as to the borders of the East Tartary.

"At the same time, and an age after, or more, the inhabitants of the great Atlantis did flourish. For though the narration and description which is made by a great man with you, that the descendants of Neptune planted there; and of the magnificent temple, palace, city, and hill; and the manifold streams of goodly navigable rivers, which, as so many chains, environed the same site and temple; and the several degrees of ascent, whereby men did climb up to the same, as if it had been a *scala cœli;* be all poetical and fabulous: yet so much is true, that the said country of Atlantis, as well that of Peru, then Coya, as that of Mexico, then named Tyrambel, were mighty and proud kingdoms, in arms, shipping, and riches: so mighty, as at one time, or at least within the space of ten years, they both made two great expeditions, they of Tyrambel, through the Atlantic to the Mediterranean Sea; and they of Coya, through the South Sea upon this our island: and for the former of these, which was into Europe, the same author amongst you, as it seemeth, had some relation from the Egyptian priest whom he citeth. For assuredly, such a thing there was. But whether it were the ancient Athenians that had the glory of the repulse and resistance of those forces, I can say nothing: but certain it is, there never came back either ship, or man, from that voyage. Neither had the other voyage of those of Coya upon us had better fortune, if they had not met with enemies of greater clemency. For the king of this island, by name Altabin, a wise man, and a great warrior; knowing well both his own strength, and that of his enemies; handled the matter so, as he cut off their land-forces from their ships, and entoiled both their navy and their camp, with a greater

power than theirs, both by sea and land; and compelled them to render themselves without striking stroke: and after they were at his mercy, contenting himself only with their oath, that they should no more bear arms against him, dismissed them all in safety. But the divine revenge overtook not long after those proud enterprises. For within less than the space of one hundred years, the great Atlantis was utterly lost and destroyed: not by a great earthquake, as your man saith, for that whole tract is little subject to earthquakes, but by a particular deluge or inundation: those countries having, at this day, far greater rivers, and far higher mountains, to pour down waters, than any part of the old world. But it is true, that the same inundation was not deep; not past forty foot, in most places, from the ground: so that although it destroyed man and beast generally, yet some few wild inhabitants of the woods escaped. Birds also were saved by flying to the high trees and woods. For as for men, although they had buildings in many places higher than the depth of the water; yet that inundation, though it were shallow, had a long continuance; whereby they of the vale, that were not drowned, perished for want of food, and other things necessary. So as marvel you not at the thin population of America, nor at the rudeness and ignorance of the people; for you must account your inhabitants of America as a young people; younger a thousand years, at the least, than the rest of the world; for that there was so much time between the universal flood and their particular inundation. For the poor remnant of human seed, which remained in their mountains, peopled the country again slowly, by little and little; and being simple and savage people, not like Noah and his sons, which was the chief family of the earth, they were not able to leave letters, arts, and civility to their posterity, and having likewise in their mountainous habitations been used, in respect of the extreme cold of those regions, to clothe themselves with the skins of tigers, bears, and great hairy goats, that they have in those parts: when after they came down into the valley, and found the intolerable heats which are there, and knew no means of lighter apparel, they were forced to begin the

custom of going naked, which continueth at this day. Only they take great pride and delight in the feathers of birds; and this also they took from those their ancestors of the mountains, who were invited unto it by the infinite flights of birds, that came up to the high grounds, while the waters stood below. So you see, by this main accident of time, we lost our traffic with the Americans, with whom, of all others, in regard they lay nearest to us, we had most commerce. As for the other parts of the world, it is most manifest, that in the ages following, whether it were in respect of wars, or by a natural revolution of time, navigation did every where greatly decay: and especially far voyages, the rather by the use of galleys, and such vessels as could hardly brook the ocean, were altogether left and omitted. So then, that part of intercourse which could be from other nations to sail to us, you see how it hath long since ceased; except it were by some rare accident, as this of yours. But now of the cessation of that other part of intercourse, which might be by our sailing to other nations, I must yield you some other cause. For I cannot say, if I shall say truly, but our shipping, for number, strength, mariners, pilots, and all things that appertain to navigation, is as great as ever: and therefore why we should sit at home, I shall now give you an account by itself: and it will draw nearer to give you satisfaction to your principal question.

"There reigned in this island, about nineteen hundred years ago, a king, whose memory of all others we most adore; not superstitiously, but as a divine instrument, though a mortal man; his name was Solomona: and we esteem him as the lawgiver of our nation. This king had a large heart, inscrutable for good, and was wholly bent to make his kingdom and people happy. He therefore taking into consideration, how sufficient and substantive this land was to maintain itself without any aid at all of the foreigner, being five thousand six hundred miles in circuit, and of rare fertility of soil, in the greatest part thereof; and finding also the shipping of this country might be plentifully set on work, both by fishing and by transportations from port to port, and

likewise by sailing unto some small islands that are not far from us, and are under the crown and laws of this state; and recalling into his memory the happy and flourishing estate wherein this land then was; so as it might be a thousand ways altered to the worse, but scarce any one way to the better; thought nothing wanted to his noble and heroical intentions, but only, as far as human foresight might reach, to give perpetuity to that, which was in his time so happily established. Therefore amongst his other fundamental laws of this kingdom, he did ordain the interdicts and prohibitions, which we have, touching entrance of strangers; which at that time, though it was after the calamity of America, was frequent; doubting novelties, and commixture of manners. It is true, the like law, against the admission of strangers without licence, is an ancient law in the kingdom of China, and yet continued in use: but there it is a poor thing; and hath made them a curious, ignorant, fearful, foolish nation. But our lawgiver made his law of another temper. For first, he hath preserved all points of humanity, in taking order, and making provision for the relief of strangers distressed, whereof you have tasted." At which speech, as reason was, we all rose up and bowed ourselves. He went on. "That king also, still desiring to join humanity and policy together; and thinking it against humanity to detain strangers here against their wills; and against policy that they should return, and discover their knowledge of this estate, he took this course: he did ordain, that of the strangers that should be permitted to land, as many, at all times, might depart as would; but as many as would stay, should have very good conditions, and means to live, from the state. Wherein he saw so far, that now in so many ages since the prohibition, we have memory, not of one ship that ever returned, and but of thirteen persons only, at several times, that chose to return in our bottoms. What those few that have returned may have reported abroad I know not: but you must think, whatsoever they have said, could be taken where they came but for a dream. Now for our travelling from hence into parts

abroad, our lawgiver thought fit altogether to restrain it. So is it not in China. For the Chinese sail where they will or can; which sheweth, that their law of keeping out strangers is a law of pusillanimity and fear. But this restraint of ours hath one only exception, which is admirable; preserving the good which cometh by communicating with strangers, and avoiding the hurt; and I will now open it to you. And here I shall seem a little to digress, but you will by and by find it pertinent. Ye shall understand, my dear friends, that amongst the excellent acts of that king, one above all hath the pre-eminence. It was the erection and institution of an order or society which we call Solomon's House; the noblest foundation, as we think, that ever was upon the earth, and the lanthorn of this kingdom. It is dedicated to the study of the works and creatures of God. Some think it beareth the founder's name a little corrupted, as if it should be Solomona's House. But the records write it as it is spoken. So as I take it to be denominate of the King of the Hebrews, which is famous with you, and no stranger to us; for we have some parts of his works, which with you are lost; namely, that Natural History which he wrote of all plants, 'from the cedar of Libanus, to the moss that groweth out of the wall;' and of all things that have life and motion. This maketh me think, that our king finding himself to symbolize in many things with that king of the Hebrews, which lived many years before him, hohoured him with the title of this foundation. And I am the rather induced to be of this opinion, for that I find in ancient records this order or society is sometimes called Solomon's House, and sometimes the college of the six days works; whereby I am satisfied, that our excellent king had learned from the Hebrews, that God had created the world, and all that therein is, within six days; and therefore he instituting that house for the finding out the true nature of all things, whereby God might have the more glory in the workmanship of them, and men the more fruit in the use of them, did give it also that second name. But now to come to our present purpose. When the king had forbidden to all

his people navigation into any part, that was not under his crown, he made nevertheless this ordinance; that every twelve years there should be set forth, out of this kingdom, two ships appointed to several voyages; that in either of these ships there should be a mission of three of the fellows or brethren of Solomon's House; whose errand was only to give us knowledge of the affairs and state of those countries to which they were designed; and especially of the sciences, arts, manufactures, and inventions of all the world; and withal to bring unto us books, instruments, and patterns in every kind: that the ships, after they had landed the brethren, should return; and that the brethren should stay abroad till the new mission. These ships are not otherwise fraught, than with store of victuals, and good quantity of treasure to remain with the brethren, for the buying of such things, and rewarding of such persons, as they should think fit. Now for me to tell you how the vulgar sort of mariners are contained from being discovered at land; and how they that must be put on shore for any time, colour themselves under the names of other nations; and to what places these voyages have been designed; and what places of rendezvous are appointed for the new missions; and the like circumstances of the practice; I may not do it: neither is it much to your desire. But thus you see we maintain a trade, not for gold, silver, or jewels; nor for silks; nor for spices; nor any other commodity of matter; but only for God's first creature, which was light: to have light, I say, of the growth of all parts of the world." And when he had said this, he was silent; and so were we all. For indeed we were all astonished to hear so strange things so probably told. And he perceiving that we were willing to say somewhat, but had it not ready, in great courtesy took us off, and descended to ask us questions of our voyage and fortunes, and in the end concluded, that we might do well to think with ourselves, what time of stay we would demand of the state; and bade us not to scant ourselves; for he would procure such time as we desired. Whereupon we all rose up, and presented ourselves to kiss the skirt of his

tippet, but he would not suffer us; and so took his leave. But when it came once amongst our people, that the state used to offer conditions to strangers that would stay, we had work enough to get any of our men to look to our ship; and to keep them from going presently to the governor to crave conditions. But with much ado we refrained them, till we might agree what course to take.

We took ourselves now for free men, seeing there was no danger of our utter perdition; and lived most joyfully, going abroad and seeing what was to be seen in the city and places adjacent within our tedder; and obtaining acquaintance with many of the city, not of the meanest quality; at whose hands we found such humanity, and such a freedom and desire to take strangers as it were into their bosom, as was enough to make us forget all that was dear to us in our own countries: and continually we met with many things, right worthy of observation and relation; as indeed, if there be a mirror in the world worthy to hold mens eyes, it is that country. One day there were two of our company bidden to a feast of the family, as they call it. A most natural, pious, and reverend custom it is, shewing that nation to be compounded of all goodness. This is the manner of it. It is granted to any man, that shall live to see thirty persons descended of his body alive together, and all above three years old, to make this feast, which is done at the cost of the state. The father of the family, whom they call the Tirsan, two days before the feast, taketh to him three of such friends as he liketh to choose; and is assisted also by the governor of the city, or place, where the feast is celebrated; and all the persons of the family of both sexes are summoned to attend him. These two days the Tirsan sitteth in consultation concerning the good estate of the family. There, if there be any discord or suits between any of the family, they are compounded and appeased. There, if any of the family be distressed or decayed, order is taken for their relief, and competent means to live. There, if any be subject to vice, or take ill courses, they are reproved and censured. So like-

wise direction is given touching marriages, and the course of life which any of them should take, with divers other the like orders and advices. The governor assisteth, to the end to put in execution, by his public authority, the decrees and orders of the Tirsan, if they should be disobeyed; though that seldom needeth; such reverence and obedience they give to the order of nature. The Tirsan doth also then ever choose one man from amongst his sons, to live in the house with him: who is called ever after the Son of the Vine. The reason will hereafter appear. On the feast-day, the father, or Tirsan, cometh forth after divine service into a large room where the feast is celebrated; which room hath an half pace at the upper end. Against the wall, in the middle of the half pace, is a chair placed for him, with a table and carpet before it. Over the chair is a state made round or oval, and it is of ivy; an ivy somewhat whiter than ours, like the leaf of a silver asp, but more shining; for it is green all winter. And the state is curiously wrought with silver and silk of divers colours, broiding or binding in the ivy; and is ever of the work of some of the daughters of the family; and veiled over at the top with a fine net of silk and silver. But the substance of it is true ivy; whereof, after it is taken down, the friends of the family are desirous to have some leaf or sprig to keep. The Tirsan cometh forth with all his generation or lineage, the males before him, and the females following him; and if there be a mother, from whose body the whole lineage is descended, there is a traverse placed in a loft above on the right hand of the chair, with a privy door, and a carved window of glass, leaded with gold and blue; where she sitteth, but is not seen. When the Tirsan is come forth, he sitteth down in the chair; and all the lineage place themselves against the wall, both at his back, and upon the return of the half pace, in order of their years, without difference of sex, and stand upon their feet. When he is set, the room being always full of company, but well kept, and without disorder; after some pause there cometh in from the lower end of the room a taratan, which is as much as an herald, and on either side

of him two young lads; whereof one carrieth a scroll of their shining yellow parchment; and the other a cluster of grapes of gold, with a long foot or stalk. The herald and children are clothed with mantles of sea-water green sattin; but the herald's mantle is streamed with gold, and hath a train. Then the herald with three curtesies, or rather inclinations, cometh up as far as the half pace; and there first taketh into his hand the scroll. This scroll is the king's charter, containing gift of revenue, and many privileges, exemptions, and points of honour, granted to the father of the family; and is ever stiled and directed, "To such an one, our well-beloved friend and creditor:" which is a title proper only to this case. For they say, the king is debtor to no man, but for propagation of his subjects. The seal set to the king's charter, is the king's image, imbossed or moulded in gold; and though such charters be expedited of course, and as of right, yet they are varied by discretion, according to the number and dignity of the family. This charter the herald readeth aloud: and while it is read, the father or Tirsan standeth up, supported by two of his sons, such as he chooseth. Then the herald mounteth the half pace, and delivereth the charter into his hand: and with that there is an acclamation by all that are present in their language, which is thus much: "Happy are the people of Bensalem." Then the herald taketh into his hand from the other child the cluster of grapes, which is of gold; both the stalk and the grapes. But the grapes are daintily enamelled; and if the males of the family be the greater number, the grapes are enamelled purple, with a little sun set on the top; if the females, then they are enamelled into a greenish yellow, with a crescent on the top. The grapes are in number as many as there are descendents of the family. This golden cluster the herald delivereth also to the Tirsan; who presently delivereth it over to that son, that he had formerly chosen to be in the house with him: who beareth it before his father as an ensign of honour, when he goeth in public, ever after; and is thereupon called the Son of the Vine. After this ceremony ended, the

father or Tirsan retireth; and after some time cometh forth again to dinner, where he sitteth alone under the state as before; and none of his descendents sit with him, of what degree or dignity soever, except he hap to be of Solomon's house. He is served only by his own children, such as are male; who perform unto him all service of the table upon the knee; and the women only stand about him, leaning against the wall. The room below the half pace hath tables on the sides for the guests that are bidden; who are served with great and comely order; and towards the end of dinner, which, in the greatest feasts with them, lasteth never above an hour and an half, there is an hymn sung, varied according to the invention of him that composeth it, for they have excellent poesy, but the subject of it is, always, the praises of Adam, and Noah, and Abraham; whereof the former two peopled the world, and the last was the father of the faithful: concluding ever with a thanksgiving for the nativity of our Saviour, in whose birth the births of all are only blessed. Dinner being done, the Tirsan retireth again; and having withdrawn himself alone into a place, where he maketh some private prayers, he cometh forth the third time, to give the blessing; with all his descendents, who stand about him as at the first. Then he calleth them forth by one and by one, by name, as he pleaseth, though seldom the order of age be inverted. The person that is called, the table being before removed, kneeleth down before the chair, and the father layeth his hand upon his head, or her head, and giveth the blessing in these words: "Son of Bensalem, or daughter of Bensalem, thy father saith it; the man by whom thou hast breath and life speaketh the word; The blessing of the everlasting Father, the Prince of peace, and the Holy Dove be upon thee, and make the days of thy pilgrimage good and many." This he saith to every of them; and that done, if there be any of his sons of eminent merit and virtue, so they be not above two, he calleth for them again; and saith, laying his arm over their shoulders, they standing; "Sons, it is well ye are born, give God the praise, and persevere to the end." And withal he

delivereth to either of them a jewel, made in the figure of an ear of wheat, which they ever after wear in the front of their turban or hat. This done, they fall to music and dances, and other recreations, after their manner, for the rest of the day. This is the full order of that feast.

By that time six or seven days were spent, I was fallen into strait acquaintance with a merchant of that city, whose name was Joabin. He was a Jew, and circumcised: for they have some few stirps of Jews yet remaining among them, whom they leave to their own religion: which they may the better do, because they are of a far differing disposition from the Jews in other parts. For whereas they hate the name of Christ, and have a secret inbred rancour against the people amongst whom they live: these, contrariwise, give unto our Saviour many high attributes, and love the nation of Bensalem extremely. Surely this man of whom I speak, would ever acknowledge that Christ was born of a virgin; and that he was more than a man; and he would tell how God made him ruler of the seraphims which guard his throne; and they call him also the milken way, and the Eliah of the Messias; and many other high names; which though they be inferior to his divine Majesty, yet they are far from the language of other Jews. And for the country of Bensalem, this man would make no end of commending it: being desirous by tradition among the Jews there, to have it believed, that the people thereof were of the generations of Abraham, by another son, whom they call Nachoran; and that Moses, by a secret cabala, ordained the laws of Bensalem which they now use; and that when the Messias should come, and sit in his throne at Hierusalem, the king of Bensalem should sit at his feet, whereas other kings should keep a great distance. But yet setting aside these Jewish dreams, the man was a wise man, and learned, and of great policy, and excellently seen in the laws and customs of that nation. Amongst other discourses, one day I told him I was much affected with the relation I had from some of the company, of their custom in holding the feast of the

family; for that, methought, I had never heard of a solemnity wherein nature did so much preside. And because propagation of families proceedeth from the nuptial copulation, I desired to know of him, what laws and customs they had concerning marriage; and whether they kept marriage well; and whether they were tied to one wife? For that where population is so much affected, and such as with them it seemed to be, there is commonly permission of plurality of wives. To this he said, "You have reason for to commend that excellent institution of the feast of the family; and indeed we have experience, that those families that are partakers of the blessing of that feast, do flourish and prosper ever after in an extraordinary manner. But hear me now, and I will tell you what I know. You shall understand, that there is not under the heavens so chaste a nation as this of Bensalem; nor so free from all pollution or foulness. It is the virgin of the world. I remember I have read in one of your European books, of an holy hermit among you, that desired to see the spirit of fornication; and there appeared to him a little foul ugly Æthiop; but if he had desired to see the spirit of chastity of Bensalem, it would have appeared to him in the likeness of a fair beautiful cherubin. For there is nothing amongst mortal men more fair and admirable, than the chaste minds of this people. Know therefore that with them there are no stews, no dissolute houses, no courtesans, nor any thing of that kind. Nay, they wonder, with detestation, at you in Europe, which permit such things. They say, ye have put marriage out of office: for marriage is ordained a remedy for unlawful concupiscence; and natural concupiscence seemeth as a spur to marriage. But when men have at hand a remedy more agreeable to their corrupt will, marriage is almost expulsed. And therefore there are with you seen infinite men that marry not, but chuse rather a libertine and impure single life, than to be yoked in marriage; and many that do marry, marry late, when the prime and strength of their years is past. And when they do marry, what is marriage to them but a very bargain; wherein is sought alliance, or

portion, or reputation, with some desire, almost indifferent, of issue; and not the faithful nuptial union of man and wife, that was first instituted. Neither is it possible, that those that have cast away so basely so much of their strength should greatly esteem children, being of the same matter, as chaste men do. So likewise during marriage, is the case much amended, as it ought to be if those things were tolerated only for necessity? No, but they remain still as a very affront to marriage. The haunting of those dissolute places, or resort to courtesans, are no more punished in married men than in bachelors. And the depraved custom of change, and the delight in meretricious embracements, where sin is turned into art, maketh marriage a dull thing, and a kind of imposition or tax. They hear you defend these things, as done to avoid greater evils; as advoutries, deflouring of virgins, unnatural lust, and the like. But they say, this is a preposterous wisdom; and they call it Lot's offer, who to save his guests from abusing, offered his daughters: nay, they say farther, that there is little gained in this; for that the same vices and appetites do still remain and abound; unlawful lust being like a furnace, that if you stop the flames altogether it will quench; but if you give it any vent it will rage. As for masculine love, they have no touch of it; and yet there are not so faithful and inviolate friendships in the world again as are there; and to speak generally, as I said before, I have not read of any such chastity in any people as theirs. And their usual saying is, That whosoever is unchaste cannot reverence himself: and they say, That the reverence of a man's self is, next religion, the chiefest bridle of all vices." And when he had said this, the good Jew paused a little; whereupon I, far more willing to hear him speak on than to speak myself; yet thinking it decent, that upon his pause of speech I should not be altogether silent, said only this; "that I would say to him, as the widow of Sarepta said to Elias; that he was come to bring to memory our sins; and that I confess the righteousness of Bensalem was greater than the righteousness of Europe." At which speech he bowed his head, and

went on in this manner: "They have also many wise and excellent laws touching marriage. They allow no polygamy; they have ordained that none do intermarry, or contract, until a month be passed from their first interview. Marriage without consent of parents they do not make void, but they mulct it in the inheritors: for the children of such marriages are not admitted to inherit above a third part of their parents inheritance. I have read in a book of one of your men, of a feigned commonwealth, where the married couple are permitted before they contract, to see one another naked. This they dislike; for they think it a scorn to give a refusal after so familiar knowledge: but because of many hidden defects in men and womens bodies, they have a more civil way; for they have near every town a couple of pools, which they call Adam and Eve's pools, where it is permitted to one of the friends of the man, and another of the friends of the woman, to see them severally bathe naked."

And as we were thus in conference, there came one that seemed to be a messenger, in a rich huke, that spake with the Jew: whereupon he turned to me and said; "You will pardon me, for I am commanded away in haste." The next morning he came to me again joyful, as it seemed, and said, "There is word come to the governor of the city, that one of the fathers of Solomon's House will be here this day seven-night: we have seen none of them this dozen years. His coming is in state; but the cause of his coming is secret. I will provide you and your fellows of a good standing to see his entry." I thanked him, and told him, I was most glad of the news. The day being come, he made his entry. He was a man of middle stature and age, comely of person, and had an aspect as if he pitied men. He was clothed in a robe of fine black cloth, with wide sleeves and a cape. His under garment was of excellent white linen down to the foot, girt with a girdle of the same; and a sindon or tippet of the same about his neck. He had gloves that were curious, and set with stone; and shoes of peach-coloured velvet. His neck was bare to the shoulders. His hat was like a helmet,

or Spanish Montera; and his locks curled below it decently: they were of colour brown. His beard was cut round, and of the same colour with his hair, somewhat lighter. He was carried in a rich chariot without wheels, litter-wise, with two horses at either end, richly trapped in blue velvet embroidered; and two footmen on each side in the like attire. The chariot was all of cedar, gilt, and adorned with crystal; save that the fore-end had pannels of sapphires, set in borders of gold, and the hinder-end the like of emeralds of the Peru colour. There was also a sun of gold, radiant upon the top, in the midst; and on the top before a small cherub of gold, with wings displayed. The chariot was covered with cloth of gold tissued upon blue. He had before him fifty attendants, young men all, in white sattin loose coats to the mid-leg, and stockings of white silk; and shoes of blue velvet; and hats of blue velvet; with fine plumes of divers colours, set round like hat-bands. Next before the chariot went two men bare-headed, in linen garments down to the foot, girt, and shoes of blue velvet, who carried the one a crosier, the other a pastoral staff, like a sheep-hook; neither of them of metal, but the crosier of balm-wood, the pastoral staff of cedar. Horsemen he had none, neither before nor behind his chariot: as it seemeth, to avoid all tumult and trouble. Behind his chariot went all the officers and principals of the companies of the city. He sat alone, upon cushions of a kind of excellent plush, blue; and under his foot curious carpets of silk of divers colours, like the Persian, but far finer. He held up his bare hand as he went, as blessing the people, but in silence. The street was wonderfully well kept; so that there was never any army had their men stand in better battle-array, than the people stood. The windows likewise were not crouded, but every one stood in them as if they had been placed. When the shew was past, the Jew said to me; "I shall not be able to attend you as I would, in regard of some charge the city hath laid upon me, for the entertaining of this great person." Three days after the Jew came to me again, and said; "Ye are happy men; for the father of Solomon's House

taketh knowledge of your being here, and commanded me to tell you, that he will admit all your company to his presence, and have private conference with one of you that ye shall choose: and for this hath appointed the next day after to-morrow. And because he meaneth to give you his blessing, he hath appointed it in the forenoon." We came at our day and hour, and I was chosen by my fellows for the private access. We found him in a fair chamber, richly hanged, and carpeted under foot, without any degrees to the state; he was set upon a low throne richly adorned, and a rich cloth of state over his head, of blue satin embroidered. He was alone, save that he had two pages of honour, on either hand one, finely attired in white. His under-garments were the like that we saw him wear in the chariot; but instead of his gown, he had on him a mantle with a cape, of the same fine black, fastened about him. When we came in, as we were taught, we bowed low at our first entrance; and when we were come near his chair, he stood up, holding forth his hand ungloved, and in posture of blessing; and we every one of us stooped down, and kissed the hem of his tippet. That done, the rest departed, and I remained. Then he warned the pages forth of the room, and caused me to sit down beside him, and spake to me thus in the Spanish tongue:

"GOD bless thee, my son; I will give thee the greatest jewel I have. For I will impart unto thee, for the love of God and men, a relation of the true state of Solomon's House. Son, to make you know the true state of Solomon's House, I will keep this order. First, I will set forth unto you the end of our foundation. Secondly, the preparations and instruments we have for our works. Thirdly, the several employments and functions whereto our fellows are assigned. And, fourthly, the ordinances and rites which we observe.

"The end of our foundation is the knowledge of causes, and secret motions of things; and the enlarging of the bounds of human empire, to the effecting of all things possible.

" The preparations and instruments are these. We have large and deep caves of several depths: the deepest are sunk six hundred fathom; and some of them are digged and made under great hills and mountains: so that if you reckon together the depth of the hill and the depth of the cave, they are, some of them, above three miles deep. For we find that the depth of an hill, and the depth of a cave from the flat, is the same thing; both remote alike from the sun and heavens beams, and from the open air. These caves we call the lower region. And we use them for all coagulations, indurations, refrigerations, and conservations of bodies. We use them likewise for the imitation of natural mines: and the producing also of new artificial metals, by compositions and materials which we use and lay there for many years. We use them also sometimes, which may seem strange, for curing of some diseases, and for prolongation of life, in some hermits that choose to live there, well accommodated of all things necessary, and indeed live very long; by whom also we learn many things.

" We have burials in several earths, where we put divers cements, as the Chineses do their porcellane. But we have them in greater variety, and some of them more fine. We have also great variety of composts, and soils, for the making of the earth fruitful.

" We have high towers; the highest about half a mile in height; and some of them likewise set upon high mountains; so that the vantage of the hill with the tower, is in the highest of them three miles at least. And these places we call the upper region; accounting the air between the high places and the low, as a middle region. We use these towers, according to their several heights and situations, for insolation, refrigeration, conservation, and for the view of divers meteors; as winds, rain, snow, hail, and some of the fiery meteors also. And upon them, in some places, are dwellings of hermits, whom we visit sometimes, and instruct what to observe.

" We have great lakes both salt and fresh, whereof we have use for the fish and fowl. We use them also for burials of some natural bodies: for we find a difference in things buried in earth, or in air below the earth; and

things buried in water. We have also pools, of which some do strain fresh water out of salt; and others by art do turn fresh water into salt. We have also some rocks in the midst of the sea: and some bays upon the shore for some works, wherein is required the air and vapour of the sea. We have likewise violent streams and cataracts, which serve us for many motions: and likewise engines for multiplying and enforcing of winds, to set also on going divers motions.

"We have also a number of artificial wells and fountains, made in imitation of the natural sources and baths; as tincted upon vitriol, sulphur, steel, brass, lead, nitre, and other minerals. And again, we have little wells for infusions of many things, where the waters take the virtue quicker and better, than in vessels or basons. And amongst them we have a water, which we call water of paradise, being, by that we do to it, made very sovereign for health, and prolongation of life.

"We have also great and spacious houses, where we imitate and demonstrate meteors; as snow, hail, rain, some artificial rains of bodies, and not of water, thunders, lightnings; also generations of bodies in air; as frogs, flies, and divers others.

"We have also certain chambers, which we call chambers of health, where we qualify the air as we think good and proper for the cure of divers diseases, and preservation of health.

"We have also fair and large baths, of several mixtures, for the cure of diseases, and the restoring of man's body from arefaction: and others, for the confirming of it in strength of sinews, vital parts, and the very juice and substance of the body.

"We have also large and various orchards and gardens, wherein we do not so much respect beauty, as variety of ground and soil, proper for divers trees and herbs: and some very spacious, where trees and berries are set, whereof we make divers kinds of drinks, besides the vineyards. In these we practise likewise all conclusions of grafting and inoculating, as well of wild trees as fruit trees, which produceth many effects. And we make, by art, in the same orchards and gardens, trees and flowers to come

earlier or later than their seasons; and to come up and bear more speedily than by their natural course they do. We make them also by art greater much than their nature; and their fruit greater, and sweeter, and of differing taste, smell, colour, and figure, from their nature. And many of them we so order, as they become of medicinal use.

"We have also means to make divers plants rise by mixtures of earths without seeds; and likewise to make divers new plants, differing from the vulgar; and to make one tree or plant turn into another.

"We have also parks and inclosures of all sorts of beasts and birds, which we use not only for view or rareness, but likewise for dissections and trials; that thereby we may take light what may be wrought upon the body of man. Wherein we find many strange effects; as continuing life in them, though divers parts, which you account vital, be perished, and taken forth; resuscitating of some that seem dead in appearance; and the like. We try also all poisons and other medicines upon them, as well of chirurgery as physic. By art likewise, we make them greater or taller than their kind is; and contrariwise dwarf them, and stay their growth: we make them more fruitful and bearing than their kind is; and contrariwise barren, and not generative. Also we make them differ in colour, shape, activity, many ways. We find means to make commixtures and copulations of divers kinds, which have produced many new kinds, and them not barren, as the general opinion is. We make a number of kinds of serpents, worms, flies, fishes, of putrefaction; whereof some are advanced in effect to be perfect creatures, like beasts, or birds; and have sexes, and do propagate. Neither do we this by chance, but we know beforehand, of what matter and commixture, what kind of those creatures will arise.

"We have also particular pools, where we make trials upon fishes, as we have said before of beasts and birds.

"We have also places for breed and generation of those kinds of worms, and flies, which are of special use; such as are with you your silk-worms and bees.

"I will not hold you long with recounting of our brew-

houses, bake-houses, and kitchens, where are made divers drinks, breads, and meats, rare and of special effects. Wines we have of grapes; and drinks of other juice, of fruits, of grains, and of roots: and of mixtures with honey, sugar, manna, and fruits dried and decocted. Also of the tears or woundings of trees, and of the pulp of canes. And these drinks are of several ages, some to the age or last of forty years. We have drinks also brewed with several herbs, and roots, and spices; yea, with several fleshes, and white meats; whereof some of the drinks are such as they are in effect meat and drink both: so that divers, especially in age, do desire to live with them, with little or no meat, or bread. And above all, we strive to have drinks of extreme thin parts, to insinuate into the body, and yet without all biting, sharpness, or fretting; insomuch as some of them put upon the back of your hand, will, with a little stay, pass through to the palm, and yet taste mild to the mouth. We have also waters which we ripen in that fashion as they become nourishing; so that they are indeed excellent drink; and many will use no other. Breads we have of several grains, roots, and kernels: yea, and some of flesh, and fish, dried; with divers kinds of leavenings and seasonings: so that some do extremely move appetites; some do nourish so, as divers do live on them, without any other meat; who live very long. So for meats, we have some of them so beaten, and made tender, and mortified, yet without all corrupting, as a weak heat of the stomach will turn them into good chylus, as well as a strong heat would meat otherwise prepared. We have some meats also, and breads and drinks, which taken by men enable them to fast long after; and some other, that used make the very flesh of mens bodies sensibly more hard and tough, and their strength far greater than otherwise it would be.

"We have dispensatories, or shops of medicines; wherein you may easily think, if we have such variety of plants and living creatures more than you have in Europe, (for we know what you have,) the simples, drugs, and ingredients of medicines, must likewise be in so much the greater variety. We have them likewise of divers ages, and long fermentations. And for their preparations,

we have not only all manner of exquisite distillations and separations, and especially by gentle heats and percolations through divers strainers, yea, and substances; but also exact forms of composition, whereby they incorporate almost as they were natural simples.

" We have also divers mechanical arts, which you have not; and stuffs made by them; as papers, linen, silks, tissues; dainty works of feathers of wonderful lustre; excellent dyes, and many others: and shops likewise as well for such as are not brought into vulgar use amongst us, as for those that are. For you must know, that of the things before recited, many of them are grown into use throughout the kingdom; but yet, if they did flow from our invention, we have of them also for patterns and principals.

" We have also furnaces of great diversities, and that keep great diversity of heats; fierce and quick; strong and constant; soft and mild; blown, quiet, dry, moist; and the like. But above all, we have heats in imitation of the sun's and heavenly bodies heats, that pass divers inequalities, and, as it were, orbs, progresses, and returns, whereby we produce admirable effects. Besides, we have heats of dungs, and of bellies and maws of living creatures, and of their bloods and bodies; and of hays and herbs laid up moist; of lime unquenched; and such like. Instruments also which generate heat only by motion. And farther, places for strong insolations: and again, places under the earth, which, by nature or art, yield heat. These divers heats we use, as the nature of the operation which we intend requireth.

" We have also perspective houses, where we make demonstrations of all lights and radiations; and of all colours; and out of things uncoloured and transparent, we can represent unto you all several colours: not in rainbows, as it is in gems and prisms, but of themselves single. We represent also all multiplications of light, which we carry to great distance; and make so sharp, as to discern small points and lines: also all colorations of light: all delusions and deceits of the sight, in figures, magnitudes, motions, colours: all demonstrations of shadows. We find also divers means yet unknown to you, of producing

of light originally from divers bodies. We procure means of seeing objects afar off; as in the heaven and remote places; and represent things near as far off; and things afar off as near; making feigned distances. We have also helps for the sight, far above spectacles and glasses in use. We have also glasses and means, to see small and minute bodies perfectly and distinctly; as the shapes and colours of small flies and worms, grains, and flaws in gems, which cannot otherwise be seen; observations in urine and blood, not otherwise to be seen. We make artificial rain-bows, halos, and circles about light. We represent also all manner of reflections, refractions, and multiplications of visual beams of objects.

"We have also precious stones of all kinds, many of them of great beauty, and to you unknown; crystals likewise; and glasses of divers kinds; and amongst them some of metals vitrificated, and other materials, besides those of which you make glass. Also a number of fossils, and imperfect minerals, which you have not. Likewise loadstones of prodigious virtue; and other rare stones, both natural and artificial.

"We have also sound-houses, where we practise and demonstrate all sounds, and their generation. We have harmonies which you have not, of quarter-sounds, and lesser slides of sounds. Divers instruments of music likewise to you unknown, some sweeter than any you have; together with bells and rings that are dainty and sweet. We represent small sounds as great and deep; likewise great sounds extenuate and sharp; we make divers tremblings and warblings of sounds, which in their original are entire. We represent and imitate all articulate sounds and letters, and the voices and notes of beasts and birds. We have certain helps, which set to the ear do further the hearing greatly. We have also divers strange and artificial echos, reflecting the voice many times, and as it were tossing it: and some that give back the voice louder than it came; some shriller, and some deeper; yea, some rendering the voice differing in the letters or articulate sound from that they receive. We have also means to convey sounds in trunks and pipes, in strange lines and distances.

" We have also perfume-houses; wherewith we join also practices of taste. We multiply smells, which may seem strange. We imitate smells, making all smells to breathe out of other mixtures than those that give them. We make divers imitations of taste likewise, so that they will deceive any man's taste. And in this house we contain also a confiture-house; where we make all sweet-meats, dry and moist; and divers pleasant wines, milks, broths, and salads, in far greater variety than you have.

" We have also engine-houses, where are prepared engines and instruments for all sorts of motions. There we imitate and practise to make swifter motions than any you have, either out of your muskets, or any engine that you have; and to make them, and multiply them more easily, and with small force, by wheels and other means: and to make them stronger, and more violent than yours are; exceeding your greatest cannons and basilisks. We represent also ordnance and instruments of war, and engines of all kinds: and likewise new mixtures and compositions of gun-powder, wild-fires burning in water, and unquenchable. Also fire-works of all variety both for pleasure and use. We imitate also flights of birds; we have some degrees of flying in the air; we have ships and boats for going under water, and brooking of seas; also swimming-girdles and supporters. We have divers curious clocks, and other like motions of return, and some perpetual motions. We imitate also motions of living creatures, by images of men, beasts, birds, fishes, and serpents; we have also a great number of other various motions, strange for equality, fineness, and subtilty.

" We have also a mathematical house, where are represented all instruments, as well of geometry as astronomy, exquisitely made.

" We have also houses of deceits of the senses; where we represent all manner of feats of juggling, false apparitions, impostures, and illusions; and their fallacies. And surely you will easily believe, that we that have so many things truly natural, which induce admiration, could in a world of particulars deceive the senses, if we

would disguise those things, and labour to make them seem more miraculous. But we do hate all impostures and lies: insomuch as we have severely forbidden it to all our fellows, under pain of ignominy and fines, that they do not shew any natural work or thing, adorned or swelling; but only pure as it is, and without all affectation of strangeness.

" These are, my son, the riches of Solomon's House.

" For the several employments and offices of our fellows; we have twelve that sail into foreign countries, under the names of other nations, for our own we conceal, who bring us the books, and abstracts, and patterns of experiments of all other parts. These we call merchants of light.

" We have three that collect the experiments which are in all books. These we call depredators.

" We have three that collect the experiments of all mechanical arts; and also of liberal sciences; and also of practices which are not brought into arts. These we call mystery-men.

" We have three that try new experiments, such as themselves think good. These we call pioneers or miners.

" We have three that draw the experiments of the former four into titles, and tables, to give the better light for the drawing of observations and axioms out of them. These we call compilers.

" We have three that bend themselves, looking into the experiments of their fellows, and cast about how to draw out of them things of use and practice for man's life and knowledge, as well for works, as for plain demonstration of causes, means of natural divinations, and the easy and clear discovery of the virtues and parts of bodies. These we call dowry-men or benefactors.

" Then after divers meetings and consults of our whole number, to consider of the former labours and collections, we have three that take care, out of them, to direct new experiments, of a higher light, more pe-

netrating into nature than the former. These we call lamps.

"We have three others that do execute the experiments so directed, and report them. These we call inoculators.

"Lastly, we have three that raise the former discoveries by experiments into greater observations, axioms, and aphorisms. These we call interpreters of nature.

"We have also, as you must think, novices and apprentices, that the succession of the former employed men do not fail: besides a great number of servants, and attendants, men and women. And this we do also: we have consultations, which of the inventions and experiences which we have discovered shall be published, and which not: and take all an oath of secrecy, for the concealing of those which we think fit to keep secret: though some of those we do reveal sometimes to the state, and some not.

"For our ordinances and rites: we have two very long and fair galleries: in one of these we place patterns and samples of all manner of the more rare and excellent inventions: in the other we place the statues of all principal inventors. There we have the statue of your Columbus, that discovered the West Indies: also the inventor of ships: your monk that was the inventor of ordnance, and of gunpowder: the inventor of music: the inventor of letters: the inventor of printing: the inventor of observations of astronomy: the inventor of works in metal: the inventor of glass: the inventor of silk of the worm: the inventor of wine: the inventor of corn and bread: the inventor of sugars: and all these by more certain tradition than you have. Then have we divers inventors of our own of excellent works; which since you have not seen, it were too long to make descriptions of them; and besides, in the right understanding of those descriptions, you might easily err. For upon every invention of value, we erect a statue to the inventor, and give him a liberal and honourable reward. These statues are, some of brass; some of mar-

ble and touchstone; some of cedar, and other special woods gilt and adorned: some of iron; some of silver; some of gold.

"We have certain hymns and services, which we say daily, of laud and thanks to God for his marvellous works: and forms of prayers, imploring his aid and blessing for the illumination of our labours; and the turning of them into good and holy uses.

"Lastly, we have circuits or visits of divers principal cities of the kingdom; where, as it cometh to pass, we do publish such new profitable inventions as we think good. And we do also declare natural divinations of diseases, plagues, swarms of hurtful creatures, scarcity, tempests, earthquakes, great inundations, comets, temperature of the year, and divers other things; and we give counsel thereupon what the people shall do for the prevention and remedy of them."

And when he had said this, he stood up; and I, as I had been taught, kneeled down; and he laid his right hand upon my head, and said; "God bless thee, my son, and God bless this relation which I have made. I give thee leave to publish it for the good of other nations; for we here are in God's bosom, a land unknown." And so he left me; having assigned a value of about two thousand ducats, for a bounty to me and my fellows. For they give great largesses where they come upon all occasions.

[*The rest was not perfected.*]

Mr. BACON

IN PRAISE OF KNOWLEDGE.

Silence were the best celebration of that, which I mean to commend; for who would not use silence, where silence is not made? and what crier can make silence in such a noise and tumult of vain and popular opinions? My praise shall be dedicated to the mind itself. The mind is the man, and the knowledge of the mind. A man is but what he knoweth. The mind itself is but an accident to knowledge; for knowledge is a double of that which is. The truth of being, and the truth of knowing, is all one. And the pleasures of the affections greater than the pleasures of the senses. And are not the pleasures of the intellect greater than the pleasures of the affections? Is it not a true and only natural pleasure, whereof there is no satiety? Is it not knowledge that doth alone clear the mind of all perturbations? How many things are there which we imagine not? How many things do we esteem and value otherwise than they are? This ill-proportioned estimation, these vain imaginations, these be the clouds of error that turn into the storms of perturbation. Is there any such happiness as for a man's mind to be raised above the confusion of things; where he may have the prospect of the order of nature, and the error of men? Is this but a vein only of delight, and not of discovery? of contentment, and not of benefit? Shall we not as well discern the riches of nature's warehouse, as the benefit of her shop? Is truth ever barren? Shall he not be able thereby to produce worthy effects, and to endow the life of man with infinite commodities? But shall I make this garland to be put upon a wrong head? Would any body believe me, if I should verify this, upon the knowledge that is now in use? Are we the richer by one poor invention, by reason of all the learning that

hath been these many hundred years? The industry of artificers maketh some small improvement of things invented; and chance sometimes in experimenting maketh us to stumble upon somewhat which is new: but all the disputation of the learned never brought to light one effect of nature before unknown. When things are known and found out, then they can descant upon them, they can knit them into certain causes, they can reduce them to their principles. If any instance of experience stand against them, they can range it in order by some distinctions. But all this is but a web of the wit, it can work nothing. I do not doubt but that common notions which we call reason, and the knitting of them together, which we call logic, are the art of reason and studies. But they rather cast obscurity, than gain light to the contemplation of nature. All the philosophy of nature which is now received, is either the philosophy of the Grecians, or that other of the alchemists. That of the Grecians hath the foundations in words, in ostentation, in confutation, in sects, in schools, in disputations. The Grecians were, as one of themselves saith, "you Grecians, ever children." They knew little antiquity; they knew, except fables, not much above five hundred years before themselves. They knew but a small portion of the world. That of the alchemists hath the foundation in imposture, in auricular traditions and obscurity. It was catching hold of religion, but the principle of it is, "Populus vult decipi." So that I know no great difference between these great philosophers, but that the one is a loud crying folly, and the other is a whispering folly. The one is gathered out of a few vulgar observations, and the other out of a few experiments of a furnace. The one never faileth to multiply words, and the other ever faileth to multiply gold. Who would not smile at Aristotle, when he admireth the eternity and invariableness of the heavens, as there were not the like in the bowels of the earth? Those be the confines and borders of these two kingdoms, where the continual alteration and incursion are. The superficies and upper parts of the earth are full of varieties. The superficies and lower parts of the

heavens, which we call the middle region of the air, is full of variety. There is much spirit in the one part, that cannot be brought into mass. There is much massy body in the other place, that cannot be refined to spirit. The common air is as the waste ground between the borders. Who would not smile at the astronomers, I mean not these few carmen which drive the earth about, but the ancient astronomers, which feign the moon to be the swiftest of the planets in motion, and the rest in order, the higher the slower; and so are compelled to imagine a double motion: whereas how evident is it, that that which they call a contrary motion, is but an abatement of motion? The fixed stars overgo Saturn, and so in them and the rest all is but one motion, and the nearer the earth the slower. A motion also whereof air and water do participate, though much interrupted. But why do I in a conference of pleasure enter into these great matters, in sort that pretending to know much, I should forget what is seasonable? Pardon me, it was because all things may be endowed and adorned with speeches, but knowledge itself is more beautiful than any apparel of words that can be put upon it. And let not me seem arrogant without respect to these great reputed authors. Let me so give every man his due, as I give Time his due, which is to discover truth. Many of these men had greater wits, far above mine own, and so are many in the universities of Europe at this day. But alas, they learn nothing there but to believe: first to believe that others know that which they know not; and after themselves know that which they know not. But indeed facility to believe, impatience to doubt, temerity to answer, glory to know, doubt to contradict, end to gain, sloth to search, seeking things in words, resting in part of nature; these, and the like, have been the things which have forbidden the happy match between the mind of man and the nature of things; and in place thereof have married it to vain notions and blind experiments: and what the posterity and issue of so honourable a match may be, it is not hard to consider. Printing, a gross invention; artillery, a thing that lay not far out of the way; the needle, a thing partly known

before: what a change have these three made in the world in these times; the one in state of learning, the other in the state of war, the third in the state of treasure, commodities, and navigation? And those, I say, were but stumbled upon and lighted upon by chance. Therefore, no doubt, the sovereignty of man lieth hid in knowledge; wherein many things are reserved, which kings with their treasure cannot buy, nor with their force command; their spials and intelligencers can give no news of them, their seamen and discoverers cannot sail where they grow: now we govern nature in opinions, but we are thrall unto her in necessity; but if we would be led by her in invention, we should command her in action.

VALERIUS TERMINUS

OF THE

INTERPRETATION OF NATURE:

WITH THE

ANNOTATIONS OF HERMES STELLA.

A FEW FRAGMENTS OF THE FIRST BOOK.

[None of the Annotations of Stella are set down in these Fragments.]

CHAP. I.

Of the limits and end of knowledge.

In the divine nature, both religion and philosophy hath acknowledged goodness in perfection, science or providence comprehending all things, and absolute sovereignty or kingdom. In aspiring to the throne of power, the angels transgressed and fell; in presuming to come within the oracle of knowledge, man transgressed and fell; but in pursuit towards the similitude of God's goodness or love, which is one thing, for love is nothing else but goodness put in motion or applied, neither man or spirit ever hath transgressed, or shall transgress.

The angel of light that was, when he presumed before his fall, said within himself, "I will ascend and be like unto the Highest;" not God, but the Highest. To be like to God in goodness, was no part of his emulation: knowledge, being in creation an angel of light, was not the want which did most solicit him; only because he was a minister he aimed at a supremacy; therefore his climbing or ascension was turned into a throwing down or precipitation.

Man on the other side, when he was tempted before he fell, had offered unto him this suggestion, "that he should be like unto God." But how? not simply, but in this part, "knowing good and evil." For being in his

creation invested with sovereignty of all inferior creatures, he was not needy of power or dominion. But again, being a spirit newly inclosed in a body of earth, he was fittest to be allured with appetite of light and liberty of knowledge. Therefore this approaching and intruding into God's secrets and mysteries, was rewarded with a further removing and estranging from God's presence. But as to the goodness of God, there is no danger in contending or advancing towards a similitude thereof; as that which is open and propounded to our imitation. For that voice, whereof the heathen and all other errors of religion have ever confessed that it sounds not like man, "Love your enemies; be you like unto your heavenly Father, that suffereth his rain to fall both upon the just and the unjust," doth well declare, that we can in that point commit no excess. So again we find it often repeated in the old law, "Be you holy as I am holy;" and what is holiness else but goodness, as we consider it separate, and guarded from all mixture, and all access of evil?

Wherefore seeing that knowledge is of the number of those things which are to be accepted of with caution and distinction; being now to open a fountain, such as it is not easy to discern where the issues and streams thereof will take and fall; I thought it good and necessary in the first place, to make a strong and sound head or bank to rule and guide the course of the waters; by setting down this position or firmament, namely, "That all knowledge is to be limited by religion, and to be referred to use and action."

For if any man shall think, by view and inquiry into these sensible and material things, to attain to any light for the revealing of the nature or will of God; he shall dangerously abuse himself. It is true, that the contemplation of the creatures of God hath for end, as to the natures of the creatures themselves, knowledge; but as to the nature of God, no knowledge, but wonder: which is nothing else but contemplation broken off, or losing itself. Nay further, as it was aptly said by one of Plato's school, "The sense of man resembles the sun, which openeth and revealeth the terrestrial globe, but

obscureth and concealeth the celestial;" so doth the sense discover natural things, but darken and shut up divine. And this appeareth sufficiently in that there is no proceeding in invention of knowledge, but by similitude; and God is only self-like, having nothing in common with any creature, otherwise than as in shadow and trope. Therefore attend his will as himself openeth it, and give unto faith that which unto faith belongeth; for more worthy it is to believe, than to think or know, considering that in knowledge, as we now are capable of it, the mind suffereth from inferior natures; but in all belief it suffereth from a spirit, which it holdeth superior, and more authorised than itself.

To conclude; the prejudice hath been infinite, that both divine and human knowledge hath received by the intermingling and tempering of the one with the other: as that which hath filled the one full of heresies, and the other full of speculative fictions and vanities.

But now there are again, which, in a contrary extremity to those which give to contemplation an overlarge scope, do offer too great a restraint to natural and lawful knowledge; being unjustly jealous that every reach and depth of knowledge wherewith their conceits have not been acquainted, should be too high an elevation of man's wit, and a searching and ravelling too far into God's secrets; an opinion that ariseth either of envy, which is proud weakness, and to be censured and not confuted, or else of a deceitful simplicity. For if they mean that the ignorance of a second cause doth make men more devoutly to depend upon the providence of God, as supposing the effects to come immediately from his hand; I demand of them, as Job demanded of his friends, "Will you lye for God, as man will for man to gratify him?" But if any man, without any sinister humour, doth indeed make doubt that this digging further and further into the mine of natural knowledge, is a thing without example, and uncommended in the Scriptures, or fruitless; let him remember and be instructed: for behold it was not that pure light

of natural knowledge, whereby man in paradise was able to give unto every living creature a name according to his propriety, which gave occasion to the fall; but it was an aspiring desire to attain to that part of moral knowledge, which defineth of good and evil, whereby to dispute God's commandments, and not to depend upon the revelation of his will, which was the original temptation. And the first holy records, which within those brief memorials of things which passed before the flood, entered few things as worthy to be registered, but only lineages and propagations, yet nevertheless honour the remembrance of the inventor both of music and works in metal. Moses again, who was the reporter, is said to have been seen in all the Egyptian learning, which nation was early and leading in matter of knowledge. And Solomon the king, as out of a branch of his wisdom extraordinarily petitioned and granted from God, is said to have written a natural history of all that is green, from the cedar to the moss, which is but a rudiment between putrefaction and an herb, and also of all that liveth and moveth. And if the book of Job be turned over, it will be found to have much aspersion of natural philosophy. Nay, the same Solomon the king affirmeth directly, that the glory of God "is to conceal a thing, but the glory of the king is to find it out," as if, according to the innocent play of children, the divine Majesty took delight to hide his works, to the end to have them found out; for in naming the king he intendeth man, taking such a condition of man as hath most excellency and greatest commandment of wits and means, alluding also to his own person, being truly one of those clearest burning lamps, whereof himself speaketh in another place, when he saith, "The spirit of man is as the lamp of God, wherewith he searcheth all inwardness;" which nature of the soul the same Solomon holding precious and inestimable, and therein conspiring with the affection of Socrates, who scorned the pretended learned men of his time for raising great benefit of their learning, whereas Anaxagoras contrariwise, and divers others, being born to

ample patrimonies, decayed them in contemplation, delivereth it in precept yet remaining, "Buy the truth, and sell it not;" and so of wisdom and knowledge.

And lest any man should retain a scruple, as if this thirst of knowledge were rather an humour of the mind, than an emptiness or want in nature, and an instinct from God; the same author defineth of it fully, saying, "God hath made every thing in beauty according to season; also he hath set the world in man's heart, yet can he not find out the work which God worketh from the beginning to the end:" declaring not obscurely that God hath framed the mind of man as a glass, capable of the image of the universal world, joying to receive the signature thereof, as the eye is of light; yea, not only satisfied in beholding the variety of things, and vicissitude of times, but raised also to find out and discern those ordinances and decrees, which throughout all these changes are infallibly observed. And although the highest generality of motion, or summary law of nature, God should still reserve within his own curtain; yet many and noble are the inferior and secondary operations which are within man's sounding. This is a thing which I cannot tell whether I may so plainly speak as truly conceive, that as all knowledge appeareth to be a plant of God's own planting, so it may seem the spreading and flourishing, or at least the bearing and fructifying of this plant, by a providence of God, nay, not only by a general providence, but by a special prophecy, was appointed to this autumn of the world: for to my understanding, it is not violent to the letter, and safe now after the event, so to interpret that place in the prophecy of Daniel, where, speaking of the latter times, it is said, "Many shall pass to and fro, and science shall be increased;" as if the opening of the world by navigation and commerce, and the further discovery of knowledge, should meet in one time or age.

But howsoever that be, there are besides the authorities of Scriptures before recited, two reasons of exceeding great weight and force, why religion should dearly protect all increase of natural knowledge: the one, because

it leadeth to the greater exaltation of the glory of God; for as the Psalms and other Scriptures do often invite us to consider, and to magnify the great and wonderful works of God; so if we should rest only in the contemplation of those shews which first offer themselves to our senses, we should do a like injury to the majesty of God, as if we should judge of the store of some excellent jeweller, by that only which is set out to the street in his shop. The other reason is, because it is a singular help and a preservative against unbelief and error; for, saith our Saviour, "You err, not knowing the Scriptures, nor the power of God;" laying before us two books or volumes to study, if we will be secured from error; first, the Scriptures revealing the will of God, and then the creatures expressing his power; for that latter book will certify us, that nothing which the first teacheth shall be thought impossible. And most sure it is, and a true conclusion of experience, that a little natural philosophy inclineth the mind to atheism, but a further proceeding bringeth the mind back to religion.

To conclude then: Let no man presume to check the liberality of God's gifts, who, as was said, "hath set the world in man's heart." So as whatsoever is not God, but parcel of the world, he hath fitted it to the comprehension of man's mind, if man will open and dilate the powers of his understanding as he may.

But yet evermore it must be remembered, that the least part of knowledge passed to man by this so large a charter from God, must be subject to that use for which God hath granted it, which is the benefit and relief of the state and society of man; for otherwise all manner of knowledge becometh malign and serpentine, and therefore, as carrying the quality of the serpent's sting and malice, it maketh the mind of man to swell; as the Scripture saith excellently, "Knowledge bloweth up, but charity buildeth up." And again, the same author doth notably disavow both power and knowledge, such as is not dedicated to goodness or love; for saith he, "If I have all faith, so as I could remove mountains," there is power active; "if I render my body to the fire," there is power passive; "if I speak with the tongues of men

and angels," there is knowledge, for language is but the conveyance of knowledge, "all were nothing."

And therefore it is not the pleasure of curiosity, nor the quiet of resolution, nor the raising of the spirit, nor victory of wit, nor faculty of speech, nor lucre of profession, nor ambition of honour or fame, or inablement for business, that are the true ends of knowledge; some of these being more worthy than other, though all inferior and degenerate: but it is a restitution and reinvesting, in great part, of man to the sovereignty and power, for whensoever he shall be able to call the creatures by their true names, he shall again command them, which he had in his first state of creation. And to speak plainly and clearly, it is a discovery of all operations and possibilities of operations from immortality, if it were possible, to the meanest mechanical practice. And therefore knowledge, that tendeth but to satisfaction, is but as a courtesan, which is for pleasure, and not for fruit or generation. And knowledge that tendeth to profit or profession, or glory, is but as the golden ball thrown before Atalanta; which while she goeth aside, and stoopeth to take up, she hindereth the race. And knowledge referred to some particular point of use, is but as Harmodius, which putteth down one tyrant: and not like Hercules, who did perambulate the world to suppress tyrants and giants and monsters in every part.

It is true, that in two points the curse is peremptory, and not to be removed: the one, that vanity must be the end in all human effects; eternity being resumed, though the revolutions and periods may be delayed. The other, that the consent of the creature being now turned into reluctation, this power cannot otherwise be exercised and administered but with labour, as well in inventing as in executing; yet nevertheless chiefly that labour and travel which is described by the sweat of the brows, more than of the body; that is, such travel as is joined with the working and discursion of the spirits in the brain: for as Solomon saith excellently, "The fool putteth to more strength, but the wise man considereth which way;" signifying the election of the mean to be

more material than the multiplication of endeavour. It is true also that there is a limitation rather potential than actual, which is when the effect is possible, but the time or place yieldeth not the matter or basis whereupon man should work. But notwithstanding these precincts and bounds, let it be believed, and appeal thereof made to time, with renunciation nevertheless to all the vain and abusing promises of alchemists and magicians, and such like light, idle, ignorant, credulous, and fantastical wits and sects, that the new-found world of land was not greater addition to the ancient continent, than there remaineth at this day a world of inventions and sciences unknown, having respect to those that are known, with this difference, that the ancient regions of knowledge will seem as barbarous, compared with the new; as the new regions of people seem barbarous, compared to many of the old.

The dignity of this end, of endowment of man's life with new commodities, appeareth by the estimation that antiquity made of such as guided thereunto; for whereas founders of states, lawgivers, extirpers of tyrants, fathers of the people, were honoured but with the titles of worthies or demi-gods, inventors were ever consecrated amongst the gods themselves. And if the ordinary ambitions of men lead them to seek the amplification of their own power in their countries, and a better ambition than that hath moved men to seek the amplification of the power of their own countries amongst other nations; better again and more worthy must that aspiring be, which seeketh the amplification of the power and kingdom of mankind over the world: the rather, because the other two prosecutions are ever culpable of much perturbation and injustice; but this is a work truly divine, which cometh *in aura leni*, without noise or observation.

The access also to this work hath been by that port or passage, which the Divine Majesty, who is unchangeable in his ways, doth infallibly continue and observe; that is, the felicity wherewith he hath blessed an humility of mind, such as rather laboureth to spell, and so by degrees to read in the volumes of his creatures, than to

solicit and urge, and as it were to invocate a man's own spirit to divine, and give oracles unto him. For as in the inquiry of divine truth, the pride of man hath ever inclined to leave the oracles of God's word, and to vanish in the mixture of their own inventions; so in the self-same manner, in inquisition of nature, they have ever left the oracles of God's works, and adorned the deceiving and deformed imagery, which the unequal mirrors of their own minds have represented unto them. Nay, it is a point fit and necessary in the front, and beginning of this work, without hesitation or reservation to be professed, that it is no less true in this human kingdom of knowledge, than in God's kingdom of heaven, that no man shall enter into it, "except he become first as a little child."

Of the impediments of knowledge.

Being the IVth chapter, the preface only of it.

In some things it is more hard to attempt than to atchieve; which falleth out, when the difficulty is not so much in the matter or subject, as it is in the crossness and indisposition of the mind of man to think of any such thing, to will or to resolve it; and therefore Titus Livius in his declamatory digression, wherein he doth depress and extenuate the honour of Alexander's conquests, saith, "Nihil aliud quam bene ausus vana contemnere:" in which sort of things it is the manner of men first to wonder that any such thing should be possible, and after it is found out, to wonder again how the world should miss it so long. Of this nature I take to be the invention and discovery of knowledge, etc.

The impediments which have been in the times, and in diversion of wits.

Being the Vth chapter, a small fragment in the beginning of that chapter.

The encounters of the times have been nothing favourable and prosperous for the invention of knowledge, so as it is not only the daintiness of the seed to take, and

the ill mixture and unliking of the ground to nourish or raise this plant, but the ill season also of the weather, by which it hath been checked and blasted. Especially in that the seasons have been proper to bring up and set forward other more hasty and indifferent plants, whereby this of knowledge hath been starved and overgrown; for in the descent of times always there hath been somewhat else in reign and reputation, which hath generally aliened and diverted wits and labours from that employment.

For as for the uttermost antiquity, which is like fame that muffles her head, and tells tales, I cannot presume much of it; for I would not willingly imitate the manner of those that describe maps, which when they come to some far countries, whereof they have no knowledge, set down how there be great wastes and deserts there: so I am not apt to affirm that they knew little, because what they knew is little known to us. But if you will judge of them by the last traces that remain to us, you will conclude, though not to scornfully as Aristotle doth, that saith our ancestors were extreme gross, as those that came newly from being moulded out of the clay, or some earthly substance; yet reasonably and probably thus, that it was with them in matter of knowledge, but as the dawning or break of day. For at that time the world was altogether home-bred, every nation looked little beyond their own confines or territories, and the world had no thorough lights then, as it hath had since by commerce and navigation, whereby there could neither be that contribution of wits one to help another, nor that variety of particulars for the correcting the customary conceits.

And as there could be no great collection of wits of several parts or nations, so neither could there be any succession of wits of several times, whereby one might refine the other, in regard they had not history to any purpose. And the manner of their traditions was utterly unfit and unproper for amplification of knowledge. And again, the studies of those times, you shall find, besides wars, incursions, and rapines, which were then almost every where betwixt states adjoining, the use of leagues

and confederacies being not then known, were to populate by multitude of wives and generation, a thing at this day in the waster part of the West-Indies principally effected; and to build, sometimes for habitation, towns and cities; sometimes for fame and memory, monuments, pyramids, colosses, and the like. And if there happened to rise up any more civil wits; then would he found and erect some new laws, customs, and usages, such as now of late years, when the world was revolute almost to the like rudeness and obscurity, we see both in our own nation and abroad many examples of, as well in a number of tenures reserved upon mens lands, as in divers customs of towns and manors, being the devises that such wits wrought upon in such times of deep ignorance, etc.

The impediments of knowledge for want of a true succession of wits, and that hitherto the length of one man's life hath been the greatest measure of knowledge.

Being the VIth chapter, the whole chapter.

In arts mechanical the first devise cometh shortest, and time addeth and perfecteth. But in sciences of conceit, the first author goeth furthest, and time leeseth and corrupteth. Painting, artillery, sailing, and the like, grossly managed at first, by time accommodate and refined. The philosophies and sciences of Aristotle, Plato, Democritus, Hippocrates, of most vigour at first, by time degenerated and imbased. In the former, many wits and industries contributed in one. In the latter many mens wits spent to deprave the wit of one.

The error is both in the deliverer and in the receiver. He that delivereth knowledge, desireth to deliver it in such form as may be soonest believed, and not as may easiliest be examined. He that receiveth knowledge desireth rather present satisfaction than expectant search, and so rather not to doubt than not to err. Glory maketh the author not to lay open his weakness: and sloth maketh the disciple not to know his strength.

Then begin men to aspire to the second prizes, to be a profound interpreter and commenter, to be a sharp

champion and defender, to be a methodical compounder and abridger. And this is the unfortunate succession of wits which the world hath yet had, whereby the patrimony of all knowledge goeth not on husbanded or improved, but wasted and decayed. For knowledge is like a water, that will never arise again higher than the level from which it fell. And therefore to go beyond Aristotle by the light of Aristotle, is to think that a borrowed light can increase the original light from whom it is taken. So then, no true succession of wits having been in the world; either we must conclude, that knowledge is but a task for one man's life, and then vain was the complaint, that "life is short, and art is long:" or else, that the knowledge that now is, is but a shrub; and not that tree which is never dangerous, but where it is to the purpose of knowing good and evil; which desire ever riseth upon an appetite to elect, and not to obey, and so containeth in it a manifest defection.

That the pretended succession of wits hath been evil placed, for as much as after variety of sects and opinions, the most popular and not the truest prevaileth and weareth out the rest.

Being the VIIth chapter, a fragment.

It is sensible to think, that when men enter first into search and inquiry, according to the several frames and compositions of their understanding, they light upon differing conceits, and so all opinions and doubts are beaten over; and then men having made a taste of all, wax weary of variety, and so reject the worst, and hold themselves to the best, either some one, if it be eminent; or some two or three, if they be in some equality; which afterwards are received and carried on, and the rest extinct.

But truth is contrary: and that time is like a river, which carrieth down things which are light and blown up, and sinketh and drowneth that which is sad and weighty. For howsoever governments have several forms, sometimes one governing, sometimes few, sometimes the multitude; yet the state of knowledge is ever a democraty, and that prevaileth which is most

agreeable to the senses and conceits of people. As for example, there is no great doubt, but he that did put the beginnings of things to be solid, void, and motion to the centre, was in better earnest than he that put matter, form, and shift; or he that put the mind, motion, and matter. For no man shall enter into inquisition of nature, but shall pass by that opinion of Democritus; whereas he shall never come near the other two opinions, but leave them aloof, for the schools and table-talk. Yet those of Aristotle and Plato, because they be both agreeable to popular sense, and the one was uttered with subtilty and the spirit of contradiction, and the other with a stile of ornament and majesty, did hold out, and the other gave place, etc.

Of the impediments of knowledge, in handling it by parts, and in slipping off particular sciences from the root and stock of universal knowledge.

Being the VIIIth chapter, the whole chapter.

Cicero the orator, willing to magnify his own profession, and thereupon spending many words to maintain that eloquence was not a shop of good words and elegancies, but a treasury and receipt of all knowledges, so far forth as may appertain to the handling and moving of the minds and affections of men by speech; maketh great complaint of the school of Socrates; that whereas before his time the same professors of wisdom in Greece did pretend to teach an universal sapience and knowledge both of matter and words, Socrates divorced them, and withdrew philosophy, and left rhetoric to itself, which by that destitution became but a barren and unnoble science. And in particular sciences we see, that if men fall to subdivide their labours, as to be an oculist in physic, or to be perfect in some one title of the law or the like, they may prove ready and subtile, but not deep or sufficient, no, not in that subject which they do particularly attend, because of that consent which it hath with the rest. And it is a matter of common discourse, of the chain of sciences, how they are linked together, insomuch as the Grecians, who had terms at will, have

fitted it of a name of Circle-Learning. Nevertheless I that hold it for a great impediment towards the advancement and further invention of knowledge, that particular arts and sciences have been disincorporated from general knowledge, do not understand one and the same thing, which Cicero's discourse and the note and conceit of the Grecians in their word Circle-Learning do intend. For I mean not that use which one science hath of another for ornament or help in practice, as the orator hath of knowledge of affections for moving, or as military science may have use of geometry for fortifications; but I mean it directly of that use by way of supply of light and information, which the particulars and instances of one science do yield and present for the framing or correcting of the axioms of another science in their very truth and notion. And therefore that example of oculists and title lawyers doth come nearer my conceit than the other two; for sciences distinguished have a dependence upon universal knowledge to be augmented and rectified by the superior light thereof; as well as the parts and members of a science have upon the maxims of the same science, and the mutual light and consent which one part receiveth of another. And therefore the opinion of Copernicus in astronomy, which astronomy itself cannot correct, because it is not repugnant to any of the appearances; yet natural philosophy doth correct. On the other side, if some of the ancient philosophers had been perfect in the observations of astronomy, and had called them to counsel when they made their principles and first axioms, they would never have divided their philosophy, as the cosmographers do their descriptions by globes, making one philosophy for heaven, and another for under heaven, as in effect they do.

So if the moral philosophers, that have spent such an infinite quantity of debate touching good and the highest good, had cast their eye abroad upon nature, and beheld the appetite that is in all things to receive and to give; the one motion affecting preservation, and the other multiplication; which appetites are most evidently seen in living creatures, in the pleasure of nourishment and generation; and in man do make the

aptest and most natural division of all his desires, being either of sense of pleasure, or sense of power; and in the universal frame of the world are figured, the one in the beams of heaven which issue forth, and the other in the lap of the earth which takes in: and again, if they had observed the motion of congruity, or situation of the parts in respect of the whole, evident in so many particulars: and lastly, if they had considered the motion, familiar in attraction of things, to approach to that which is higher in the same kind: when, by these observations, so easy and concurring in natural philosophy, they should have found out this quaternion of good, in enjoying or fruition, effecting or operation, consenting or proportion, and approach or assumption; they would have saved and abridged much of their long and wandering discourses of pleasure, virtue, duty, and religion. So likewise in this same logic and rhetoric, or acts of argument and grace of speech, if the great masters of them would but have gone a form lower, and looked but into the observations of grammar concerning the kinds of words, their derivations, deflexions, and syntax, specially inriching the same, with the helps of several languages, with their differing proprieties of words, phrases, and tropes; they might have found out more and better footsteps of common reason, help of disputation, and advantages of cavillation, than many of these which they have propounded. So again, a man should be thought to dally, if he did note how the figures of rhetoric and music are many of them the same. The repetitions and traductions in speech, and the reports and hauntings of sounds in music, are the very same things. Plutarch hath almost made a book of the Lacedæmonian kind of jesting, which joined ever pleasure with distaste. "Sir," said a man of art to Philip king of Macedon, when he controlled him in his faculty, "God forbid your fortune should be such as to know these things better than I." In taxing his ignorance in his art, he represented to him the perpetual greatness of his fortune, leaving him no vacant time for so mean a skill. Now in music it is one of the ordinariest flowers to fall from a discord, or hard tune, upon a

sweet accord. The figure that Cicero and the rest commend, as one of the best points of elegancy, which is the fine checking of expectation, is no less well known to the musicians, when they have a special grace in flying the close or cadence. And these are no allusions but direct communities, the same delights of the mind being to be found not only in music, rhetoric, but in moral philosophy, policy, and other knowledges, and that obscure in the one, which is more apparent in the other; yea, and that discovered in the one, which is not found at all in the other; and so one science greatly aiding to the invention and augmentation of another. And therefore, without this intercourse, the axioms of sciences will fall out to be neither full nor true; but will be such opinions, as Aristotle in some places doth wisely censure, when he saith, "These are the opinions of persons that have respect but to a few things." So then we see, that this note leadeth us to an administration of knowledge in some such order and policy, as the king of Spain, in regard of his great dominions, useth in state: who, though he hath particular councils for several countries and affairs, yet hath one council of state, or last resort, that receiveth the advertisements and certificates from all the rest. Hitherto of the diversion, succession, and conference of wits.

That the end and scope of knowledge hath been generally mistaken, and that men were never well advised what it was they sought.

Being the IXth chapter, immediately preceding the Inventory, and inducing the same.

It appeareth then how rarely the wits and labours of men have been converted to the severe and original inquisition of knowledge; and in those who have pretended, what hurt hath been done by the affectation of professors, and the distraction of such as were no professors; and how there was never in effect any conjunction or combination of wits in the first and inducing search, but that every man wrought apart, and would either have his own way, or else would go no further

than his guide, having in the one case the honour of a first, and in the other the ease of a second; and lastly, how in the descent and continuance of wits and labours, the succession hath been in the most popular and weak opinions, like unto the weakest natures, which many times have most children; and in them also the condition of succession hath been rather to defend and to adorn, than to add; and if to add, yet that addition to be rather a refining of a part, than an increase of the whole. But the impediments of time and accidents, though they have wrought a general indisposition, yet are they not so peremptory and binding, as the internal impediments and clouds in the mind and spirit of man, whereof it now followeth to speak.

The Scripture, speaking of the worst sort of error, saith, "Errare fecit eos in invio et non in via." For a man may wander in the way, by rounding up and down; but if men have failed in their very direction and address, that error will never by good fortune correct itself. Now it hath fared with men in their contemplations, as Seneca saith it fareth with them in their actions, "De partibus vitæ quisque deliberat, de summa nemo." A course very ordinary with men who receive for the most part their final ends from the inclination of their nature, or from common example and opinion, never questioning or examining them, nor reducing them to any clear certainty; and use only to call themselves to account and deliberation touching the means and second ends, and thereby set themselves in the right way to the wrong place. So likewise upon the natural curiosity and desire to know, they have put themselves in way without foresight or consideration of their journey's end.

For I find that even those that have sought knowledge for itself and not for benefit, or ostentation, or any practical inablement in the course of their life, have nevertheless propounded to themselves a wrong mark, namely, satisfaction, which men call truth, and not operation. For as in the courts and services of princes and states, it is a much easier matter to give satisfaction than to do the business; so in the inquiring of causes

and reasons it is much easier to find out such causes as will satisfy the mind of man, and quiet objections, than such causes as will direct him and give him light to new experiences and inventions. And this did Celsus note wisely and truly, how that the causes which are in use, and whereof the knowledges now received do consist, were in time minors and subsequents to the knowledge of the particulars, out of which they were induced and collected; and that it was not the light of those causes which discovered particulars, but only the particulars being first found, men did fall on glossing and discoursing of the causes; which is the reason, why the learning that now is hath the curse of barrenness, and is courtesan-like, for pleasure, and not for fruit. Nay, to compare it rightly, the strange fiction of the poets of the transformation of Scylla, seemeth to be a lively emblem of this philosophy and knowledge: a fair woman upward in the parts of show, but when you come to the parts of use and generation, barking monsters; for no better are the endless distorted questions, which ever have been, and of necessity must be, the end and womb of such knowledge. . . . . .

But yet nevertheless, here I may be mistaken, by reason of some which have much in their pen the referring sciences to action and the use of man, which mean quite another matter than I do. For they mean a contriving of directions, and precepts for readiness of practice, which I discommend not, so it be not occasion that some quantity of the science be lost; for else it will be such a piece of husbandry, as to put away a manor lying somewhat scattered, to buy in a close that lieth handsomely about a dwelling. But my intention contrariwise is to increase and multiply the revenues and possessions of man, and not to trim up only, or order with conveniency the grounds whereof he is already stated. Wherefore the better to make myself understood, that I mean nothing less than words, and directly to demonstrate the point which we are now upon, that is, what is the true end, scope, or office of knowledge, which I have set down to consist not in any plausible, delectable, reverend, or admired discourse, or

any satisfactory arguments, but in effecting and working, and in discovery of particulars not revealed before, for the better endowment and help of man's life; I have thought good to make, as it were, a kalendar or inventory of the wealth, furniture, or means of man, according to his present estate, as far as it is known; which I do not to shew any universality of sense or knowledge, and much less to make a satire of reprehension in respect of wants and errors, but partly because cogitations new had need of some grossness and inculcation to make them perceived, and chiefly to the end, that for the time to come, upon the account and state now made and cast up, it may appear what increase this new manner of use and administration of the stock, if it be once planted, shall bring with it hereafter; and for the time present, in case I should be prevented by death to propound and reveal this new light as I purpose, yet I may at the least give some awaking note, both of the wants in man's present condition, and the nature of the supplies to be wished; though for mine own part neither do I much build upon my present anticipations, neither do I think ourselves yet learned or wise enough to wish reasonably: for as it asks some knowledge to demand a question not impertinent; so it asketh some sense, to make a wish not absurd.

The Inventory, or an enumeration and view of inventions already discovered in use, together with a note of the wants, and the nature of the supplies.

Being the Xth chapter; and this a small fragment thereof, being the preface to the Inventory.

The plainest method, and most directly pertinent to this intention, will be to make distribution of sciences, arts, inventions, works, and their portions, according to the use and tribute which they yield and render to the conditions of man's life, and under those several uses, being as several offices of provisions, to charge and tax what may be reasonably exacted or demanded, not guiding ourselves neither by the poverty of experiences and

probations, nor according to the vanity of credulous imaginations; and then upon those charges and taxations to distinguish and present, as it were, in several columns, what is extant and already found, and what is defective and further to be provided. Of which provisions, because in many of them, after the manner of slothful and faulty officers and accomptants, it will be returned, by way of excuse, that no such are to be had, it will be fit to give some light of the nature of the supplies, whereby it will evidently appear, that they are to be compassed and procured. And yet nevertheless on the other side again, it will be as fit to check and controul the vain and void assignations and gifts, whereby certain ignorant, extravagant, and abusing wits have pretended to indue the state of man with wonders, differing as much from truth in nature, as Cæsar's commentaries differeth from the acts of King Arthur, or Huon of Bourdeaux, in story. For it is true that Cæsar did greater things than those idle wits had the audacity to feign their supposed worthies to have done; but he did them not in that monstrous and fabulous manner.

The chapter immediately following the Inventory.

Being the XIth in order, a part thereof.

It appeareth then, what is now in proposition, not by general circumlocution, but by particular note, no former philosophy varied in terms or method; no new *placet* or speculation upon particulars already known; no referring to action, by any manual of practice; but the revealing and discovering of new inventions and operations. This to be done without the errors and conjectures of art, or the length or difficulties of experience; the nature and kinds of which inventions have been described as they could be discovered; for your eye cannot pass one kenning without further sailing: only we have stood upon the best advantages of the notions received, as upon a mount, to shew the knowledges adjacent and confining. If therefore the true end of knowledge, not propounded, hath bred large

error, the best and perfectest condition of the same end, not perceived, will cause some declination. For when the butt is set up, men need not rove, but except the white be placed, men cannot level. This perfection we mean, not in the worth of the effects, but in the nature of the direction; for our purpose is not to stir up mens hopes, but to guide their travels. The fulness of direction to work, and produce any effect, consisteth in two conditions, certainty and liberty. Certainty is, when the direction is not only true for the most part, but infallible. Liberty is, when the direction is not restrained to some definite means, but comprehendeth all the means and ways possible; for the poet saith well, "Sapientibus undique latæ sunt viæ;" and where there is the greatest plurality of change, there is the greatest singularity of choice. Besides, as a conjectural direction maketh a casual effect, so a particular and restrained direction is no less casual than uncertain. For those particular means whereunto it is tied, may be out of your power, or may be accompanied with an overvalue of prejudice; and so, if for want of certainty in direction, you are frustrated in success, for want of variety in direction, you are stopped in attempt. If therefore your direction be certain, it must refer you, and point you to somewhat, which if it be present, the effect you seek will of necessity follow, else may you perform and not obtain. If it be free, then must it refer you to somewhat, which if it be absent, the effect you seek will of necessity withdraw, else may you have power and not attempt. This notion Aristotle had in light, though not in use. For the two commended rules by him set down, whereby the axioms of sciences are precepted to be made convertible, and which the latter men have not without elegancy surnamed, the one the rule of truth, because it preventeth deceit; the other the rule of prudence, because it freeth election; are the same thing in speculation and affirmation, which we now observe. An example will make my meaning attained, and yet percase make it thought that they attained it not.

Let the effect to be produced be whiteness; let the first direction be, that if air and water be intermingled,

or broken in small portions together, whiteness will ensue; as in snow, in the breaking of the ways of the sea and rivers, and the like. This direction is certain, but very particular; and restrained, being tied but to air and water. Let the second direction be, that if air be mingled as before with any transparent body, such nevertheless as is uncoloured and more grossly transparent than air itself, that then, etc. as glass or crystal, being beaten to fine powder, by the interposition of the air becometh white; the white of an egg, being clear of itself, receiving air by agitation, becometh white, receiving air by concoction becometh white; here you are freed from water, and advanced to a clear body, and still tied to air. Let the third direction exclude or remove the restraint of an uncoloured body, as in amber, sapphires, etc. which beaten to fine powder, become white in wine and beer; which brought to froth, become white. Let the fourth direction exclude the restraint of a body more grossly transparent than air, as in flame, being a body compounded between air and a finer substance than air; which flame if it were not for the smoke, which is the third substance that incorporateth itself and dieth, the flame would be more perfect white. In all these four directions air still beareth a part. Let the fifth direction then be, that if any bodies, both transparent, but in an unequal degree, be mingled as before, whiteness will follow: as oil and water beaten to an ointment, though by settling, the air which gathereth in the agitation be evaporate, yet remaineth white: and the powder of glass, or crystal, put into water, whereby the air giveth place, yet remaineth white, though not so perfect. Now are you freed from air, but still are you tied to transparent bodies. To ascend further by scale I do forbear, partly because it would draw on the example to an over-great length, but chiefly because it would open that which in this work I determine to reserve; for to pass through the whole history and observation of colours and objects visible, were too long a digression; and our purpose is now to give an example of a free direction, thereby to distinguish and describe it; and not to set down a form of interpretation how to recover and attain it. But as

we intend not now to reveal, so we are circumspect not to mislead; and therefore, this warning being given, returning to our purpose in hand, we admit the sixth direction to be, that all bodies, or parts of bodies, which are unequal equally, that is, in a simple proportion, do represent whiteness; we will explain this, though we induce it not. It is then to be understood, that absolute equality produceth transparence, inequality in simple order or proportion produceth whiteness, inequality in compound or respective order or proportion produceth other colours, and absolute or orderless inequality produceth blackness; which diversity, if so gross a demonstration be needful, may be signified by four tables; a blank, a chequer, a fret, and a medley; whereof the fret is evident to admit great variety. Out of this assertion are satisfied a multitude of effects and observations, as that whiteness and blackness are most incompatible with transparence; that whiteness keepeth light, and blackness stoppeth light, but neither passeth it; that whiteness or blackness are never produced in rainbows, diamonds, crystals, and the like; that white giveth no dye, and black hardly taketh dye; that whiteness seemeth to have an affinity with dryness, and blackness with moisture; that adustion causeth blackness, and calcination whiteness; that flowers are generally of fresh colours, and rarely black, etc. all which I do now mention confusedly by way of derivation, and not by way of induction. This sixth direction, which I have thus explained, is of good and competent liberty, for whiteness fixed and inherent; but not for whiteness fantastical, or appearing, as shall be afterwards touched. But first do you need a reduction back to certainty or verity; for it is not all position or contexture of unequal bodies that will produce colours; for aqua fortis, oil of vitriol, etc. more manifestly, and many other substances more obscurely, do consist of very unequal parts, which yet are transparent and clear. Therefore the reduction must be, that the bodies or parts of bodies so intermingled as before, be of a certain grossness or magnitude; for the unequalities which move the sight must have a further dimension and quality, than those

which operate many other effects. Some few grains of saffron will give a tincture to a tun of water, but so many grains of civet will give a perfume to a whole chamber of air. And therefore when Democritus, from whom Epicurus did borrow it, held that the position of the solid portions was the cause of colours; yet in the very truth of this assertion he should have added, that the portions are required to be of some magnitude. And this is one cause why colours have little inwardness and necessitude with the nature and proprieties of things, those things resembling in colour, which otherwise differ most, as salt and sugar; and contrariwise differing in colour, which otherwise resemble most, as the white and blue violets, and the several veins of one agate or marble, by reason that other virtues consist in more subtile proportions than colours do; and yet are there virtues and natures which require a grosser magnitude than colours, as well as scents and divers other require a more subtile; for as the portion of a body will give forth scent, which is too small to be seen, so the portion of a body will shew colours, which is too small to be endued with weight; and therefore one of the prophets with great elegancy describing how all creatures carry no proportion towards God the creator, saith, "that all the nations in respect of him are like the dust upon the balance;" which is a thing appeareth, but weigheth not. But to return, there resteth a further freeing of this sixth direction: for the clearness of a river or stream sheweth white at a distance, and crystalline glasses deliver the face or any other object falsified in whiteness, and long beholding the snow, to a weak eye, giveth an impression of azure, rather than of whiteness. So as for whiteness in apparition only, and representation, by the qualifying of the light, altering the intermedium, or affecting the eye itself, it reacheth not. But you must free your direction to the producing of such an incidence, impression, or operation, as may cause a precise and determinate passion of the eye, a matter which is much more easy to induce than that which we have passed through; but yet because it hath a full coherence both with that act of radiation, which hath hitherto been conceived and termed so unproperly

and untruly, by some, an effluxion of spiritual species, and by others, an investing of the intermedium, with a motion which successively is conveyed to the eye, and with the act of sense, wherein I should likewise open that which I think good to withdraw, I will omit.

Neither do I contend, but that this notion, which I call the freeing of a direction in the received philosophies, as far as a swimming anticipation could take hold, might be perceived and discerned; being not much other matter than that which they did not only aim at in the two rules of axioms before remembered, but more nearly also than that which they term the form or formal cause, or that which they call the true difference; both which nevertheless, it seemeth, they propound rather as impossibilities and wishes, than as things within the compass of human comprehension: for Plato casteth his burthen, and saith, "that he will revere him as a God, that can truly divide and define;" which cannot be but by true forms and differences, wherein I join hands with him, confessing as much, as yet assuming to myself little; for if any man can, by the strength of his anticipations, find out forms, I will magnify him with the foremost. But as any of them would say, that if divers things, which many men know by instruction and observation, another knew by revelation, and without those means, they would take him for somewhat supernatural and divine; so I do acknowledge, that if any man can by anticipations reach to that which a weak and inferior wit may attain to by interpretation, he cannot receive too high a title. Nay, I for my part do indeed admire to see how far some of them have proceeded by their anticipations; but how? it is as I wonder at some blind men, to see what shift they make without their eye-sight; thinking with myself that if I were blind, I could hardly do it. Again, Aristotle's school confesseth, that there is no true knowledge but by causes, no true cause but the form, no true form known except one, which they are pleased to allow; and therefore thus far their evidence standeth with us, that both hitherto there hath been nothing but a shadow of knowledge, and that we propound now that which is agreed to be worthiest to be

sought, and hardest to be found. There wanteth now a part very necessary, not by way of supply, but by way of caution: for as it is seen for the most part, that the outward tokens and badge of excellency and perfection are more incident to things merely counterfeit, than to that which is true, but for a meaner and baser sort; as a dubline is more like a perfect ruby than a spinel, and a counterfeit angel is made more like a true angel, than if it were an angel coined of China gold; in like manner, the direction carrieth a resemblance of a true direction in verity and liberty, which indeed is no direction at all. For though your direction seem to be certain and free, by pointing you to nature that is unseparable from the nature you enquire upon; yet if it do not carry you on a degree or remove nearer to action, operation, or light, to make or produce, it is but superficial and counterfeit. Wherefore to secure and warrant what is a true direction, though that general note I have given be perspicuous in itself, for a man shall soon cast with himself, whether he be ever the near to effect and operate or no, or whether he have won but an abstract or varied notion, yet for better instruction I will deliver three particular notes of caution. The first is, that the nature discovered be more original than the nature supposed, and not more secondary, or of the like degree: as to make a stone bright, or to make it smooth, it is a good direction to say, make it even; but to make a stone even, it is no good direction to say, make it bright, or make it smooth: for the rule is, that the disposition of any thing referring to the state of it in itself, or the parts, is more original than that which is relative or transitive towards another thing. So evenness is the disposition of the stone in itself, but smooth is to the hand, and bright to the eye, and yet nevertheless they all cluster and concur; and yet the direction is more unperfect, if it do appoint you to such a relative, as is in the same kind, and not in a diverse. For in the direction, to produce brightness by smoothness, although properly it win no degree, and will never teach you any new particulars before unknown, yet by way of suggestion, or bringing to mind, it may draw your consideration to some particulars known but not remembered; as you

shall sooner remember some practical means of making smoothness, than if you had fixed your consideration only upon brightness; but if the direction had been to make brightness, by making reflection, as thus, make it such as you may see your face in it; this is merely secondary, and helpeth neither by way of informing, nor by way of suggesting. So if in the inquiry of whiteness you were directed to make such a colour as should be seen furthest in a dark light; here you are advanced nothing at all. For these kinds of natures are but proprieties, effects, circumstances, concurrences, or what else you shall like to call them, and not radical and formative natures towards the nature supposed. The second caution is, that the nature inquired be collected by division before composition, or to speak more properly, by composition subaltern, before you ascend to composition absolute, etc.

Of the internal and profound errors and superstitions in the nature of the mind, and of the four sorts of idols or fictions which offer themselves to the understanding in the inquisition of knowledge.

Being the XVIth chapter, and this a small fragment thereof, being a preface to the inward elenches of the mind.

The opinion of Epicurus, that the gods were of human shape, was rather justly derided than seriously confuted by the other sects, demanding whether every kind of sensible creatures did not think their own figure fairest, as the horse, the bull, and the like, which found no beauty but in their own forms, as in appetite of lust appeared. And the heresy of the Anthropomorphites was ever censured for a gross conceit, bred in the obscure cells of solitary monks that never looked abroad. Again, the fable so well known of "Quis pinxit leonem," doth set forth well, that there is an error of pride and partiality, as well as of custom and familiarity. The reflection also from glasses so usually resembled to the imagery of the mind, every man knoweth to receive error and variety both in colour, magnitude, and shape, according to the

quality of the glass. But yet no use hath been made of these and many the like observations to move men to search out, and upon search to give true cautions of the native and inherent errors in the mind of man, which have coloured and corrupted all his notions and impressions.

I do find therefore in this enchanted glass four idols, or false appearances of several and distinct sorts, every sort comprehending many subdivisions: the first sort, I call idols of the nation or tribe; the second, idols of the palace; the third, idols of the cave; and the fourth, idols of the theatre, etc.

Here followeth an abridgment of divers chapters of the first book of the INTERPRETATION OF NATURE.

CHAP. XII.

That in deciding and determining of the truth of knowledge, men have put themselves upon trials not competent. That antiquity and authority, common and confessed notions, the natural and yielding consent of the mind, the harmony and coherence of a knowledge in itself, the establishing of principles with the touch and reduction of other propositions unto them, inductions without instances contradictory, and the report of the senses, are none of them absolute and infallible evidence of truth; and bring no security sufficient for effects and operations. That the discovery of new works or active directions not known before, is the only trial to be accepted of; and yet not that neither, in case where one particular giveth light to another; but where particulars induce an axiom or observation, which axiom found out, discovereth and designeth new particulars. That the nature of this trial is not only upon the point, whether the knowledge be profitable or no, but even upon the point, whether the knowledge be true or no. Not because you may always conclude, that the axiom which discovereth new instances is true; but contrariwise you may safely conclude, that if it discover not any new instance, it is vain and untrue. That by new instances

are not always to be understood new recipes, but new assignations; and of the diversity between these two. That the subtilty of words, arguments, notions, yea of the senses themselves, is but rude and gross in comparison of the subtilty of things. And of the slothful and flattering opinions of those which pretend to honour the mind of man in withdrawing and abstracting it from particulars; and of the inducements and motives whereupon such opinions have been conceived and received.

CHAP. XIII.

Of the error in propounding chiefly the search of causes and productions of things concrete, which are infinite and transitory; and not of abstract natures, which are few and permanent. That these natures are as the alphabet or simple letters, whereof the variety of things consisteth; or as the colours mingled in the painter's shell, wherewith he is able to make infinite variety of faces or shapes. An enumeration of them according to popular note. That at the first one would conceive that in the schools by natural philosophy were meant the knowledge of the efficients of things concrete; and by metaphysic the knowledge of the forms of natures simple; which is a good and fit division of knowledge: but upon examination there is no such matter by them intended. That the little inquiry into the production of simple natures, sheweth well that works were not sought; because by the former knowledge some small and superficial deflexions from the ordinary generations and productions may be found out, but the discovery of all profound and radical alteration must arise out of the latter knowledge.

CHAP. XIV.

Of the error in propounding the search of the materials, or dead beginnings or principles of things, and not the nature of motions, inclinations, and applications. That the whole scope of the former search is impertinent and vain; both because there are no such beginnings, and if there were they could not be known. That

the latter manner of search, which is all, they pass over compendiously and slightly as a bye matter. That the several conceits in that kind; as that the lively and moving beginnings of things should be shift or appetite of matter to privation; the spirit of the world, working in matter according to platform; the proceeding or fructifying of distinct kinds according to their proprieties; the intercourse of the elements by mediation of their common qualities; the appetite of like portions to unite themselves; amity and discord, or sympathy and antipathy; motion to the centre, with motion of stripe or press; the casual agitation, aggregation, and essays of the solid portions in the void space; motion of shuttings and openings; are all mere nugations. And that the calculating and ordination of the true degrees, moments, limits and laws of motions and alterations, by means whereof all works and effects are produced, is a matter of a far other nature than to consist in such easy and wild generalities.

CHAP. XV.

Of the great error of inquiring knowledge in anticipations. That I call anticipations, the voluntary collections that the mind maketh of knowledge, which is every man's reason. That though this be a solemn thing, and serves the turn to negotiate between man and man, because of the conformity and participation of mens minds in the like errors, yet towards inquiry of the truth of things and works it is of no value. That civil respects are a lett that this pretended reason should not be so contemptibly spoken of, as were fit and medicinable, in regard that hath been too much exalted and glorified, to the infinite detriment of man's estate. Of the nature of words, and their facility and aptness to cover and grace the defects of anticipations. That it is no marvel if these anticipations have brought forth such diversity and repugnance in opinions, theories or philosophies, as so many fable, of several arguments. That had not the nature of civil customs and government been in most times somewhat adverse to such in-

novations, though contemplative, there might have been, and would have been many more. That the second school of the Academics and the sect of Pyrrho, or the considerers, that denied comprehension as to the disabling of man's knowledge, entertained in anticipations, is well to be allowed: but that they ought, when they had overthrown and purged the floor of the ruins, to have sought to build better in place. And more especially that they did unjustly and prejudicially, to charge the deceit upon the report of the senses, which admitteth very sparing remedy; being indeed to have been charged upon the anticipations of the mind, which admitteth a perfect remedy. That the information of the senses is sufficient, not because they err not, but because the use of the sense in discovering of knowledge is for the most part not immediate. So that it is the work, effect, or instance, that trieth the axiom, and the sense doth but try the work done or not done, being or not being. That the mind of man in collecting knowledge needeth great variety of helps, as well as the hand of man in manual and mechanical practices needeth great variety of instruments. And that it were a poor work, that if instruments were removed, men would overcome with their naked hands. And of the distinct points of want and insufficiency in the mind of man.

CHAP. XVI.

That the mind of a man, as it is not a vessel of that content or receipt to comprehend knowledge without helps and supplies; so again it is not sincere, but of an ill and corrupt tincture. Of the inherent and profound errors and superstitions in the nature of the mind, and of the four sorts of idols or false appearances that offer themselves to the understanding in the inquisition of knowledge; that is to say, the idols of the tribe, the idols of the palace, the idols of the cave, and the idols of the theatre: That these four, added to the incapacity of the mind, and the vanity and malignity of the affections, leave nothing but impotency and confusion. A recital of the particular kinds of these four idols,

with some chosen examples of the opinions they have begot, such of them as have supplanted the state of knowledge most.

CHAP. XVII.

Of the errors of such as have descended and applied themselves to experience, and attempted to induce knowledge upon particulars. That they have not had the resolution and strength of mind to free themselves wholly from anticipations, but have made a confusion and intermixture of anticipations and observations, and so vanished. That if any have had the strength of mind generally to purge away and discharge all anticipations; they have not had that greater and double strength and patience of mind, as well to repel new anticipations after the view and search of particulars, as to reject old which were in their mind before; but have from particulars and history flown up to principles without the mean degrees, and so framed all the middle generalities or axioms, not by way of scale or ascension from particulars, but by way of derivation from principles, whence hath issued the infinite chaos of shadows and moths, wherewith both books and minds have been hitherto, and may be yet hereafter much more pestered. That in the course of those derivations to make them yet the more unprofitable, they have used, when any light of new instance opposite to any assertion appeared, rather to reconcile the instance than to amend the rule. That if any have had, or shall have the power and resolution to fortify and inclose his mind against all anticipations, yet if he have not been or shall not be cautioned by the full understanding of the nature of the mind and spirit of man, and therein of the states, pores and passages both of knowledge and error, he hath not been nor shall not be possibly able to guide or keep on his course aright. That those that have been conversant in experience and observation, have used, when they have intended to discover the cause of any effect, to fix their consideration narrowly and exactly upon that effect itself, with all the circumstances thereof, and to vary the trial thereof as many ways as can be devised;

which course amounteth but to a tedious curiosity, and ever breaketh off in wondering, and not in knowing. And that they have not used to enlarge their observation to match and sort that effect with instances of a diverse subject, which must of necessity be before any cause be found out. That they have passed over the observation of instances vulgar and ignoble, and stayed their attention chiefly upon instances of mark; whereas the other sort are for the most part more significant, and of better light and information. That every particular that worketh any effect, is a thing compounded, more or less, of diverse single natures, more manifest and more obscure, and that it appeareth not to whether of the natures the effect is to be ascribed; and yet notwithstanding they have taken a course without breaking particulars, and reducing them by exclusions and inclusions to a definite point, to conclude upon inductions in gross; which empirical course is no less vain than the scholastical. That all such as have sought action and work out of their inquiry, have been hasty and pressing to discover some practices for present use, and not to discover axioms, joining with them the new assignations as their sureties. That the forerunning of the mind to frame recipes upon axioms at the entrance, is like Atalanta's golden ball that hindereth and interrupteth the course; and is to be inhibited till you have ascended to a certain stage and degree of generalities; which forbearance will be liberally recompensed in the end; and that chance discovereth new inventions by one and one, but science by knots and clusters. That they have not collected sufficient quantity of particulars, nor them in sufficient certainty and subtilty, nor of all several kinds, nor with those advantages and discretions in the entry and sorting which are requisite; and of the weak manner of collecting natural history, which hath been used. Lastly, that they had no knowledge of the formulary of interpretation, the work whereof is to abridge experience, and to make things as certainly found out by axiom in short time, as by infinite experience in ages.

CHAP. XVIII.

That the cautels and devices put in practice in the delivery of knowledge for the covering and palliating of ignorance, and the gracing and over-valuing of that they utter, are without number; but none more bold and more hurtful than two: the one, that men have used of a few observations upon any subject to make a solemn and formal art; by filling it up with discourse, accommodating it with some circumstances and directions to practice, and digesting it into method, whereby men grow satisfied and secure, as if no more inquiry were to be made of that matter; the other, that men have used to discharge ignorance with credit, in defining all those effects which they cannot attain unto, to be out of the compass of art and human endeavour. That the very styles and forms of utterance are so many characters of imposture, some choosing a style of pugnacity and contention, some of satire and reprehension, some of plausible and tempting similitudes and examples, some of great words and high discourse, some of short and dark sentences, some of exactness of method, all of positive affirmation; without disclosing the true motives and proofs of their opinions, or free confessing their ignorance or doubts, except it be now and then for a grace, and in cunning to win the more credit in the rest, and not in good faith. That although men be free from these errors and incumbrances in the will and affection, yet it is not a thing so easy as is conceived, to convey the conceit of one man's mind into the mind of another, without loss or mistaking, especially in notions new and differing from those that are received. That never any knowledge was delivered in the same order it was invented, no not in the mathematics, though it should seem otherwise, in regard that the propositions placed last do use the propositions or grants placed first for their proof and demonstration. That there are forms and methods of tradition wholly distinct and differing, according to their ends whereto they are directed. That there are two ends of tradition

of knowledge, the one to teach and instruct for use and practice, the other to impart or intimate for re-examination and progression. That the former of these ends requireth a method not the same, whereby it was invented and induced, but such as is most compendious and ready, whereby it may be used and applied. That the latter of the ends, which is where a knowledge is delivered to be continued and spun on by a succession of labours, requireth a method whereby it may be transposed to another in the same manner as it was collected, to the end it may be discerned both where the work is weak, and where it breaketh off. That this latter method is not only unfit for the former end, but also impossible for all knowledge gathered and insinuated by anticipations, because the mind working inwardly of itself, no man can give a just account how he came to know that knowledge which he hath received, and that therefore this method is peculiar for knowledge gathered by interpretation. That the discretion anciently observed, though by the precedent of many vain persons and deceivers disgraced, of publishing part and reserving part to a private succession, and of publishing in a manner whereby it shall not be to the capacity nor taste of all, but shall as it were single and adopt his reader, is not to be laid aside, both for the avoiding of abuse in the excluded, and the strengthening of affection in the admitted. That there are other virtues of tradition, as that there be no occasion given to error, and that it carry a vigour to root and spread against the vanity of wits and injuries of time; all which, if they were ever due to any knowledge delivered, or if they were never due to any human knowledge heretofore delivered, yet are now due to the knowledge propounded.

CHAP. XIX.

Of the impediments which have been in the affections, the principle whereof hath been despair or diffidence, and the strong apprehension of the difficulty, obscurity, and infiniteness which belongeth to the invention of knowledge, and that men have not known

their own strength; and that the supposed difficulties and vastness of the work is rather in shew and muster, than in state or substance, where the true way is taken. That this diffidence hath moved and caused some never to enter into search, and others, when they have been entered, either to give over, or to seek a more compendious course than can stand with the nature of true search. That of those that have refused and prejudged inquiry, the more sober and grave sort of wits have depended upon authors and traditions, and the more vain and credulous resorted to revelation and intelligence with spirits and higher natures. That of those that have entered into search, some having fallen upon some conceits, which they after consider to be the same which they have found in former authors, have suddenly taken a persuasion that a man shall, but with much labour, incur and light upon the same inventions which he might with ease receive from others, and that it is but a vanity and self-pleasing of the wit to go about again, as one that would rather have a flower of his own gathering, than much better gathered to his hand. That the same humour of sloth and diffidence suggesteth, that a man shall but revive some ancient opinion, which was long ago propounded, examined, and rejected. And that it is easy to err in conceit, that a man's observation or notion is the same with a former opinion, both because new conceits must of necessity be uttered in old words, and because upon true and erroneous grounds men may meet in consequence or conclusion, as several lines or circles that cut in some one point. That the greatest part of those that have descended into search have chosen for the most artificial and compendious course, to induce principles out of particulars, and to reduce all other propositions unto principles; and so, instead of the nearest way, have been led to no way, or a mere labyrinth. That the two contemplative ways have some resemblance with the old parable of the two moral ways, the one beginning with incertainty and difficulty, and ending in plainness and certainty; and the other beginning with shew of plainness and certainty, and ending in difficulty and incertainty. Of

the great and manifest error and untrue conceit or estimation of the infiniteness of particulars, whereas indeed all prolixity is in discourse and derivations; and of the infinite and most laborious expence of wit that hath been employed upon toys and matters of no fruit or value. That although the period of one age cannot advance men to the furthest point of interpretation of nature, except the work should be undertaken with greater helps than can be expected, yet it cannot fail in much less space of time to make return of many singular commodities towards the state and occasions of man's life. That there is less reason of distrust in the course of interpretation now propounded, than in any knowledge formerly delivered, because this course doth in sort equal mens wits, and leaveth no great advantage or pre-eminence to the perfect and excellent motions of the spirit. That to draw a straight line, or to make a circle perfect round by aim of hand only, there must be a great difference between an unsteady and unpractised hand and a steady and practised; but to do it by rule or compass, it is much alike.

CHAP. XXI.

Of the impediments which have been in the two extreme humours of admiration of antiquity and love of novelty; and again, of over-servile reverence, or over-light scorn of the opinions of others.

CHAP. XXII.

Of the impediments which have been in the affection of pride, specially of one kind, which is the disdain of dwelling and being conversant much in experience and particulars, especially such as are vulgar in occurrency, and base and ignoble in use. That besides certain higher mysteries of pride, generalities seem to have a dignity and solemnity, in that they do not put men in mind of their familiar actions, in that they have less affinity with arts mechanical and illiberal, in that they are not so subject to be controuled by persons of mean

observation, in that they seem to teach men that they know not, and not to refer them to that they know. All which conditions directly feeding the humour of pride, particulars do want. That the majesty of generalities, and the divine nature of the mind in taking them, if they be truly collected, and be indeed the direct reflexions of things, cannot be too much magnified. And that it is true, that interpretation is the very natural and direct intention, action, and progression of the understanding, delivered from impediments. And that all anticipation is but a deflexion or declination by accident.

CHAP. XXV.

Of the impediments which have been in the state of heathen religion, and other superstitions and errors of religion. And that in the true religion there hath not, nor is any impediment, except it be by accident or intermixture of humour. That a religion which consisteth in rites and forms of adoration, and not in confessions and beliefs, is adverse to knowledge; because men having liberty to inquire and discourse of theology at pleasure, it cometh to pass that all inquisition of nature endeth and limiteth itself in such metaphysical or theological discourse; whereas if mens wits be shut out of that port, it turneth them again to discover, and so to seek reason of reason more deeply. And that such was the religion of the Heathen. That a religion that is jealous of the variety of learning, discourse, opinions, and sects, as misdoubting it may shake the foundations, or that cherisheth devotion upon simplicity and ignorance, as ascribing ordinary effects to the immediate working of God, is adverse to knowledge. That such is the religion of the Turk, and such hath been the abuse of Christian religion at some several times, and in some several factions. And of the singular advantage which the Christian religion hath towards the furtherance of true knowledge, in that it excludeth and interdicteth human reason, whether by interpretation or anticipation, from examining or discussing of the mysteries and principles of faith.

CHAP. XXVI.

Of the impediments which have been in the nature of society, and the policies of state. That there is no composition of estate or society, nor order or quality of persons, which have not some point of contrariety towards true knowledge. That monarchies incline wits to profit and pleasure, and commonweaths to glory and vanity. That universities incline wits to sophistry and affectation; cloisters to fables and unprofitable subtilty; study at large to variety; and that it is hard to say, whether mixture of contemplations with an active life, or retiring wholly to contemplations, do disable and hinder the mind more.

FILUM LABYRINTHI,

SIVE

FORMULA INQUISITIONIS.

AD FILIOS.

PARS PRIMA.

1. Francis Bacon thought in this manner. The knowledge whereof the world is now possessed, especially that of nature, extendeth not to magnitude and certainty of works. The physician pronounceth many diseases incurable, and faileth oft in the rest. The alchemists wax old and die in hopes. The magicians perform nothing that is permanent and profitable. The mechanics take small light from natural philosophy, and do but spin on their own little threads. Chance sometimes discovereth inventions; but that worketh not in years, but ages. So he saw well, that the inventions known are very unperfect, and that new are not like to be brought to light, but in great length of time; and that those which are, came not to light by philosophy.

2. He thought also this state of knowledge was the worse, because men strive against themselves to save the credit of ignorance, and to satisfy themselves in this poverty. For the physician, besides the cauteles of practice, hath this general cautele of art, that he dischargeth the weakness of his art upon supposed impossibilities; neither can his art be condemned, when itself judgeth. That philosophy also, out of which the knowledge of physic which now is in use is hewed, receiveth certain positions and opinions, which, if they be well weighed, induce this persuasion, that no great works are to be expected from art, and the hand of man; as, in particular, that opinion, that "the heat of the sun and fire differ in kind;" and that other, "that com-

position is the work of man, and mixture is the work of nature," and the like; all tending to the circumscription of man's power, and to artificial despair; killing in men not only the comfort of imagination, but the industry of trial: only upon vain-glory, to have their art thought perfect, and that all is impossible that is not already found. The alchemist dischargeth his art upon his own errors, either supposing a misunderstanding of the words of his authors, which maketh him listen after auricular traditions; or else a failing in the true proportions and scruples of practice, which maketh him renew infinitely his trials; and finding also that he lighteth upon some mean experiments and conclusions by the way, feedeth upon them, and magnifieth them to the most, and supplieth the rest in hopes. The magician, when he findeth something, as he conceiveth, above nature, effected, thinketh, when a breach is once made in nature, that it is all one to perform great things and small; not seeing, that they are but subjects of a certain kind, wherein magic and superstition hath played in all times. The mechanical person, if he can refine an invention, or put two or three observations or practices together in one, or couple things better with their use, or make the work in less or greater volume, taketh himself for an inventor. So he saw well, that men either persuade themselves of new inventions as of impossibilities; or else think they are already extant, but in secret and in few hands; or that they account of those little industries and additions, as of inventions; all which turneth to the averting of their minds from any just and constant labour, to invent further in any quantity.

3. He thought also, when men did set before themselves the variety and perfection of works produced by mechanical arts, they are apt rather to admire the provisions of man, than to apprehend his wants; not considering, that the original inventions and conclusions of nature, which are the life of all that variety, are not many, nor deeply fetched; and that the rest is but the subtile and ruled motion of the instrument and hand; and that the shop therein is not unlike the library,

which in such number of books containeth, for the far greater part, nothing but iterations, varied sometimes in form, but not new in substance. So he saw plainly, that opinion of store was a cause of want; and that both works and doctrines appear many, and are few.

4. He thought also, that knowledge is uttered to men in a form, as if every thing were finished; for it is reduced into arts and methods; which in their divisions do seem to include all that may be. And how weakly soever the parts are filled, yet they carry the shew and reason of a total; and thereby the writings of some received authors go for the very art: whereas antiquity used to deliver the knowledge which the mind of man had gathered, in observations, aphorisms, or short and dispersed sentences, or small tractates of some parts that they had diligently meditated and laboured; which did invite men, both to ponder that which was invented, and to add and supply further. But now sciences are delivered to be believed and accepted, and not to be examined and further discovered; and the succession is between master and disciple, and not between inventor and continuer or advancer; and therefore sciences stand at a stay, and have done for many ages, and that which is positive is fixed, and that which is question is kept question, so as the columns of no further proceeding are pitched. And therefore he saw plainly men had cut themselves off from further invention; and that it is no marvel, that that is not obtained which hath not been attempted, but rather shut out and debarred.

5. He thought also, that knowledge is almost generally sought either for delight and satisfaction, or for gain or profession, or for credit and ornament, and that every of these are as Atalanta's balls, which hinder the race of invention. For men are so far in these courses from seeking to increase the mass of knowledge, as of that mass which is they will take no more than will serve their turn: and if any one amongst so many seeketh knowledge for itself, yet he rather seeketh to know the variety of things, than to discern of the truth and causes of them; and if his inquisition be yet more severe, yet it tendeth rather to judgment than to inven-

tion; and rather to discover truth in controversy, than new matter; and if his heart be so large as he propoundeth to himself further discovery or invention, yet it is rather of new discourse and speculation of causes, than of effects and operations. And as for those that have so much in their mouths, action and use and practice, and the referring of sciences thereunto; they mean it of application of that which is known, and not of a discovery of that which is unknown. So he saw plainly, that this mark, namely, invention of further means to endow the condition and life of man with new powers or works, was almost never yet set up and resolved in man's intention and inquiry.

6. He thought also, that, amongst other knowledges, natural philosophy hath been the least followed and laboured. For since the Christian faith, the greatest number of wits have been employed, and the greatest helps and rewards have been converted unto divinity. And before-time likewise, the greatest part of the studies of philosophers was consumed in moral philosophy, which was as the heathen divinity. And in both times a great part of the best wits betook themselves to law, pleadings, and causes of estate; specially in the time of the greatness of the Romans, who by reason of their large empire needed the service of all their able men for civil business. And the time amongst the Grecians, in which natural philosophy seemed most to flourish, was but a short space; and that also rather abused in differing sects and conflicts of opinions than profitably spent. Since which time, natural philosophy was never any profession, nor never possessed any whole man, except perchance some monk in a cloister, or some gentleman in the country, and that very rarely; but become a science of passage, to season a little young and unripe wits, and to serve for an introduction to other arts, especially physic and the practical mathematics. So as he saw plainly, that natural philosophy hath been intended by few persons, and in them hath occupied the least part of their time; and that in the weakest of their age and judgment.

7. He thought also, how great opposition and pre-

judice natural philosophy had received by superstition, and the immoderate and blind zeal of religion; for he found that some of the Grecians, which first gave the reason of thunder, had been condemned of impiety; and that the cosmographers, which first discovered and described the roundness of the earth, and the consequence thereof touching the Antipodes, were not much otherwise censured by the ancient fathers of the Christian Church; and that the case is now much worse, in regard of the boldness of the schoolmen and their dependences in the monasteries, who having made divinity into an art, have almost incorporated the contentious philosophy of Aristotle into the body of Christian religion: and generally he perceived in men of devout simplicity this opinion, that the secrets of nature were the secrets of God; and part of that glory whereinto the mind of man, if it seek to press, shall be oppressed; and that the desire in men to attain to so great and hidden knowledge, hath a resemblance with that temptation which caused the original fall; and on the other side, in men of a devout policy, he noted an inclination to have the people depend upon God the more, when they are less acquainted with second causes; and to have no stirring in philosophy, lest it may lead to an innovation in divinity, or else should discover matter of further contradiction to divinity. But in this part, resorting to the authority of the Scriptures, and holy examples, and to reason, he rested not satisfied alone, but much confirmed. For first he considered that the knowledge of nature, by the light whereof man discerned of every living creature, and imposed names according to their propriety, was not the occasion of the fall; but the moral knowledge of good and evil, affected to the end to depend no more upon God's commandments, but for man to direct himself. Neither could he find in any Scripture, that the inquiry and science of man in any thing, under the mysteries of the Deity, is determined and restrained, but contrariwise allowed and provoked. For concerning all other knowledge the Scripture pronounceth, "That it is the glory of God to conceal, but it is the glory of man (or of the king, for the king is

but the excellency of man) to invent;" and again, "The spirit of man is as the lamp of God, wherewith he searcheth every secret;" and again most effectually, "That God hath made all things beautiful and decent, according to the return of their seasons; also that he hath set the world in man's heart, and yet man cannot find out the work which God worketh from the beginning to the end:" shewing that the heart of man is a continent of that concave or capacity, wherein the content of the world, that is, all forms of the creatures, and whatsoever is not God, may be placed, or received; and complaining, that through the variety of things, and vicissitudes of times, which are but impediments and not impuissances, man cannot accomplish his invention. In precedent also he set before his eyes, that in those few memorials before the flood, the Scripture honoureth the name of the inventors of music and works in metal; that Moses had this addition of praise, that he was seen in all the learning of the Egyptians; that Solomon, in his grant of wisdom from God, had contained, as a branch thereof, that knowledge whereby he wrote a natural history of all verdure, from the cedar to the moss, and of all that breatheth: that the book of Job, and many places of the prophets, have great aspersion of natural philosophy; that the Church in the bosom and lap thereof, in the greatest injuries of times, ever preserved, as holy relicks, the books of philosophy and all heathen learning; and that when Gregory, the bishop of Rome, became adverse and unjust to the memory of heathen antiquity, it was censured for pusillanimity in him, and the honour thereof soon after restored, and his own memory almost persecuted by his successor Sabinian; and lastly, in our times, and the ages of our fathers, when Luther and the divines of the Protestant Church on the one side, and the Jesuits on the other, have enterprised to reform, the one the doctrine, the other the discipline and manners of the Church of Rome, he saw well how both of them have awaked to their great honour and succour all human learning. And for reason, there cannot be a greater and more evident than this, that all knowledge,

and especially that of natural philosophy, tendeth highly to the magnifying of the glory of God in his power, providence, and benefits, appearing and engraven in his works, which without this knowledge are beheld but as through a veil: for if the heavens in the body of them do declare the glory of God to the eye, much more do they in the rule and decrees of them declare it to the understanding. And another reason, not inferior to this, is, that the same natural philosophy principally amongst all other human knowledge, doth give an excellent defence against both extremes of religion, superstition, and infidelity; for both it freeth the mind from a number of weak fancies and imaginations, and it raiseth the mind to acknowledge that to God all things are possible: for to that purpose speaketh our Saviour in that first canon against heresies, delivered upon the case of the resurrection, "You err, not knowing the Scriptures, nor the power of God;" teaching that there are but two fountains of heresy, not knowing the will of God revealed in the Scriptures, and not knowing the power of God revealed or at least made most sensible in his creatures. So as he saw well, that natural philosophy was of excellent use to the exaltation of the Divine Majesty; and, that which is admirable, that being a remedy of superstition, it is nevertheless an help to faith. He saw likewise, that the former opinions to the prejudice hereof had no true ground; but must spring either out of mere ignorance, or out of an excess of devotion, to have divinity all in all, whereas it should be only above all; both which states of mind may be best pardoned; or else out of worse causes, namely out of envy, which is proud weakness, and deserveth to be despised; or out of some mixture of imposture, to tell a lie for God's cause; or out of an impious diffidence, as if men should fear to discover some things in nature which might subvert faith. But still he saw well, howsoever these opinions are in right reason reproved, yet they leave not to be most effectual hindrances to natural philosophy and invention.

8. He thought also, that there wanted not great contrariety to the further discovery of sciences in regard

of the orders and customs of universities, and also in regard of common opinion. For in universities and colleges mens studies are almost confined to certain authors, from which if any dissenteth or propoundeth matter of redargution, it is enough to make him thought a person turbulent; whereas if it be well advised, there is a great difference to be made between matters contemplative and active. For in government change is suspected, though to the better; but it is natural to arts to be in perpetual agitation and growth. Neither is the danger alike of new light, and of new motion or remove; and for vulgar and received opinions, nothing is more usual, or more usually complained of, than that it is imposed for arrogancy and presumption, for men to authorise themselves against antiquity and authors, towards whom envy is ceased, and reverence by time amortised: it not being considered what Aristotle himself did, upon whom the philosophy that now is chiefly dependeth, who came with a professed contradiction to all the world, and did put all his opinions upon his own authority and argument, and never so much as nameth an author, but to confute and reprove him; and yet his success well fulfilled the observation of Him that said, "If a man come in his own name, him will you receive." Men think likewise, that if they should give themselves to the liberty of invention and travail of inquiry, that they shall light again upon some conceits and contemplations which have been formerly offered to the world, and have been put down by better, which have prevailed and brought them to oblivion; not seeing, that howsoever the property and breeding of knowledges is in great and excellent wits, yet the estimation and price of them is in the multitude, or in the inclinations of princes and great persons meanly learned. So as those knowledges are like to be received and honoured, which have their foundation in the subtilty or finest trial of common sense, or such as fill the imagination, and not such knowledge as is digged out of the hard mine of history and experience, and falleth out to be in some points as adverse to common sense, or popular reason, as religion, or more. Which kind of knowledge,

except it be delivered with strange advantages of eloquence and power, may be likely to appear and disclose a little to the world, and straight to vanish and shut again. So that time seemeth to be of the nature of a river or flood, that bringeth down to us that which is light and blown up, and sinketh and drowneth that which is solid and grave. So he saw well, that both in the state of religion, and in the administration of learning, and in common opinion, there were many and continual stops, and traverses to the course of invention.

9. He thought also, that the invention of works and further possibility was prejudiced in a more special manner than that of speculative truth; for besides the impediments common to both, it hath by itself been notably hurt and discredited by the vain promises and pretences of alchemy, magic, astrology, and such other arts, which, as they now pass, hold much more of imagination and belief, than of sense and demonstration. But to use the poet's language, men ought to have remembered, that although Ixion of a cloud in the likeness of Juno begat Centaurs and Chimæras, yet Jupiter also of the true Juno begat Vulcan and Hebe. Neither is it just to deny credit to the greatness to the acts of Alexander, because the like or more strange have been feigned of an Amadis or an Arthur, or other fabulous worthies. But though this in true reason should be, and that men ought not to make a confusion of unbelief; yet he saw well it could not otherwise be in event, but that experience of untruth had made access to truth more difficult, and that the ignominy of vanity had abated all greatness of mind.

10. He thought also, there was found in the mind of man an affection naturally bred and fortified, and furthered by discourse and doctrine, which did pervert the true proceeding towards active and operative knowledge. This was a false estimation, that it should be as a diminution to the mind of man to be much conversant in experiences and particulars, subject to sense, and bound in matter, and which are laborious to search, ignoble to meditate, harsh to deliver, illiberal to practise, infinite as is supposed in number, and no ways

accommodate to the glory of arts. This opinion or state of mind received much credit and strength by the school of Plato, who thinking that particulars rather revived the notions, or excited the faculties of the mind, than merely informed; and having mingled his philosophy with superstition, which never favoureth the sense, extolleth too much the understanding of man in the inward light thereof. And again, Aristotle's school, which giveth the due to the sense in assertion, denieth it in practice much more than that of Plato. For we see the schoolmen, Aristotle's successors, which were utterly ignorant of history, rested only upon agitation of wit; whereas Plato giveth good example of inquiry by induction and view of particulars; though in such a wandering manner as is of no force or fruit. So that he saw well, that the supposition of the sufficiency of man's mind hath lost the means thereof.

SEQUELA CHARTARUM;

SIVE

INQUISITIO LEGITIMA

DE

CALORE ET FRIGORE.

SECTIO ORDINIS.

Charta suggestionis, sive Memoria fixa.

The sun-beams hot to sense.

The moon-beams not hot, but rather conceived to have a quality of cold, for that the greatest colds are noted to be about the full, and the greatest heats about the change. *Query.*

The beams of the stars have no sensible heat by themselves; but are conceived to have an augmentative heat of the sun-beams by the instance following. The same climate arctic and antarctic are observed to differ in cold, *viz.* that the antarctic is the more cold, and it is manifest the antarctic hemisphere is thinner planted with stars.

The heats observed to be greater in July than in June; at which time the sun is nearest the greatest fixed stars, viz. Cor Leonis, Cauda Leonis, Spica Virginis, Sirius, Canicula.

The conjunction of any two of the three highest planets noted to cause great heats.

Comets conceived by some to be as well causes as effects of heat, much more the stars.

The sun-beams have greater heat when they are more perpendicular than when they are more oblique; as appeareth in difference of regions, and the difference of the times of summer and winter in the same region; and chiefly in the difference of the hours of mid-day, mornings, evenings in the same day.

The heats more extreme in July and August than in May or June, commonly imputed to the stay and continuance of heat.

The heats more extreme under the tropics than under the line: commonly imputed to the stay and continuance of heat, because the sun there doth as it were double a cape.

The heats more about three or four of clock than at noon; commonly imputed to the stay and continuance of heat.

The sun noted to be hotter when it shineth forth between clouds, than when the sky is open and serene.

The middle region of the air hath manifest effects of cold, notwithstanding locally it be nearer the sun, commonly imputed to antiperistasis, assuming that the beams of the sun are hot either by approach or by reflection, and that falleth in the middle term between both; or if, as some conceive, it be only by reflexion, then the cold of that region resteth chiefly upon distance. The instances shewing the cold of that region, are the snows which descend, the hails which descend, and the snows and extreme colds which are upon high mountains.

But *Qu.* of such mountains as adjoin to sandy vales, and not to fruitful vales, which minister no vapours; or of mountains above the region of vapours, as is reported of Olympus, where any inscription upon the ashes of the altar remained untouched of wind or dew. And note, it is also reported, that men carry up sponges with vinegar to thicken their breath, the air growing too fine for respiration, which seemeth not to stand with coldness.

The clouds make a mitigation of the heat of the sun. So doth the interposition of any body, which we term shades; but yet the nights in summer are many times as hot to the feeling of mens bodies as the days are within doors, where the beams of the sun actually beat not.

There is no other nature of heat known from the celestial bodies or from the air, but that which cometh by the sun-beams. For in the countries near the pole, we see the extreme colds end in the summer months, as in the voyage of Nova Zembla, where they could not

disengage their barks from the ice, no not in July, and met with great mountains of ice, some floating, some fixed, at that time of the year, being the heart of summer.

The caves under the earth noted to be warmer in winter than in summer, and so the waters that spring from within the earth.

Great quantity of sulphur, and sometimes naturally burning after the manner of Ætna, in Iceland; the like written of Greenland, and divers other the cold countries.[1]

The trees in the cold countries are such as are fuller of rosin, pitch, tar, which are matters apt for fire, and the woods themselves more combustible than those in much hotter countries; as for example, fir, pine-apple, juniper: *Qu.* whether their trees of the same kind that ours are, as oak and ash, bear not, in the more cold countries, a wood more brittle and ready to take fire than the same kinds with us?

The sun-beams heat manifestly by reflection, as in countries pent in with hills, upon walls or buildings, upon pavements, upon gravel more than earth, upon arable more than grass, upon rivers if they be not very open, etc.

The uniting or collection of the sun-beams multiplieth heat, as in burning-glasses, which are made thinner in the middle than on the sides, as I take it, contrary to spectacles; and the operation of them is, as I remember, first to place them between the sun and the body to be fired, and then to draw them upward towards the sun, which it is true maketh the angle of the cone sharper. But then I take it if the glass had been first placed at the same distance, to which it is after drawn, it would not have had that force, and yet that had been all one to the sharpness of the angle. *Qu.*

So in that the sun's beams are hotter perpendicularly than obliquely, it may be imputed to the union of the beams, which in case of perpendicularity reflect into the very same lines with the direct; and the further from perpendicularity the more obtuse the angle, and the

[1] No doubt but infinite power of the heat of the sun in cold countries, though it be not to the analogy of men, and fruits, etc.

greater distance between the direct beam and the reflected beam.

The sun-beams raise vapours out of the earth, and when they withdraw they fall back in dews.

The sun-beams do many times scatter the mists which are in the mornings.

The sun-beams cause the divers returns of the herbs, plants, and fruits of the earth; for we see in lemon-trees and the like, that there is coming on at once fruit ripe, fruit unripe, and blossoms; which may shew that the plant worketh to put forth continually, were it not for the variations of the accesses and recesses of the sun, which call forth and put back.

The excessive heat of the sun doth wither and destroy vegetables, as well as the cold doth nip and blast them.

The heat or beams of the sun doth take away the smell of flowers, specially such as are of a milder odour.

The beams of the sun do disclose summer flowers, as the pimpernel, marigold, and almost all flowers else, for they close commonly morning and evening, or in overcast weather, and open in the brightness of the sun; which is but imputed to dryness and moisture, which doth make the beams heavy or erect; and not to any other propriety in the sun-beams; so they report not only a closing, but a bending or inclining in the heliotropium and calendula. *Qu.*

The sun-beams do ripen all fruits, and addeth to them a sweetness or fatness; and yet some sultry hot days overcast, are noted to ripen more than bright days.

The sun-beams are thought to mend distilled waters, the glasses being well-stopped, and to make them the more virtuous and fragrant.

The sun-beams do turn wine into vinegar; but *Qu.* whether they would not sweeten verjuice?

The sun-beams do pall any wine or beer that is set in them.

The sun-beams do take away the lustre of any silks or arras.

There is almost no mine but lieth some depth in the earth; gold is conceived to lie highest, and in the hottest countries; yet Thracia and Hungary are cold, and the

hills of Scotland have yielded gold, but in small grains or quantity.

If you set a root of a tree too deep in the ground, that root will perish, and the stock will put forth a new root nearer the superficies of the earth.

Some trees and plants prosper best in the shade: as the bayes, strawberries, some wood-flowers.

Almost all flies love the sun-beams, so do snakes; toads and worms the contrary.

The sun-beams tanneth the skin of man; and in some places turneth it to black.

The sun-beams are hardly endured by many, but cause head-ach, faintness, and with many they cause rheums; yet to aged men they are comfortable.

The sun causes pestilence, which with us rage about autumn: but it is reported in Barbary they break up about June, and rage most in the winter.

The heat of the sun, and of fire, and living creatures, agree in some things which pertain to vivification; as the back of a chimney will set forward an apricot-tree as well as the sun; the fire will raise a dead butterfly as well as the sun; and so will the heat of a living creature. The heat of the sun in sand will hatch an egg. *Qu.*

The heat of the sun in the hottest countries nothing so violent as that of fire, no not scarcely so hot to the sense as that of a living creature.

The sun, a fountain of light as well as heat. The other celestial bodies manifest in light, and yet *non constat* whether all borrowed, as in the moon; but obscure in heat.

The southern and western wind with us is the warmest, whereof the one bloweth from the sun, the other from the sea; the northern and eastern the more cold. *Qu.* whether in the coast of Florida, or at Brasil, the east wind be not the warmest, and the west the coldest; and so beyond the antarctic tropic, the southern wind the coldest.

The air useth to be extreme hot before thunders.

The sea and air ambient, appeareth to be hotter than that at land; for in the northern voyages two or three degrees farther at the open sea, they find less ice than

two or three degrees more south near land: but *Qu.* for that may be by reason of the shores and shallows.

The snows dissolve fastest upon the sea-coasts, yet the winds are counted the bitterest from the sea, and such as trees will bend from. *Qu.*

The streams or clouds of brightness which appear in the firmament, being such through which the stars may be seen, and shoot not, but rest, are signs of heat.

The pillars of light, which are so upright, and do commonly shoot and vary, are signs of cold; but both these are signs of drought.

The air when it is moved is to the sense colder; as in winds, fannings, ventilabra.

The air in things fibrous, as fleeces, furs, etc. warm; and those stuffs to the feeling warm.

The water to man's body seemeth colder than the air; and so in summer, in swimming it seemeth at the first going in; and yet after one hath been in a while, at the coming forth again, the air seemeth colder than the water.

The snow more cold to the sense than water, and the ice than snow; and they have in Italy means to keep snow and ice for the cooling of their drinks: *Qu.* whether it be so in froth in respect of the liquor?

Baths of hot water feel hottest at the first going in.

The frost dew which we see in hoar frost, and in the rymes upon trees or the like, accounted more mortifying cold than snow; for snow cherisheth the ground, and any thing sowed in it; the other biteth and killeth.

Stone and metal exceeding cold to the feeling more than wood: yea more than jet or amber, or horn, which are no less smooth.

The snow is ever in the winter season, but the hail, which is more of the nature of ice, is ever in the summer season; whereupon it is conceived, that as the hollows of the earth are warmest in the winter, so that region of the air is coldest in the summer; as if they were a fugue of the nature of either from the contrary, and a collecting itself to an union, and so to a further strength.

So in the shades under trees, in the summer, which stand in an open field, the shade noted to be colder than in a wood.

Cold effecteth congelation in liquors, so as they do consist and hold together, which before did run.

Cold breaketh glasses, if they be close stopped, in frost, when the liquor freezeth within.

Cold in extreme maketh metals, that are dry and brittle, cleft and crack, *Æraque dissiliunt;* so of pots of earth and glass.

Cold maketh bones of living creatures more fragile.

Cold maketh living creatures to swell in the joints, and the blood to clot, and turn more blue.

Bitter frosts do make all drinks to taste more dead and flat.

Cold maketh the arteries and flesh more asper and rough.

Cold causes rheums and distillations by compressing the brain, and laxes by like reason.

Cold increases appetite in the stomach, and willingness to stir.

Cold maketh the fire to scald and sparkle.

Paracelsus reporteth, that if a glass of wine be set upon a terras in a bitter frost, it will leave some liquor unfrozen in the centre of the glass, which excelleth *spiritus vini* drawn by fire.

Cold in Muscovy, and the like countries, causes those parts which are voidest of blood, as the nose, the ears, the toes, the fingers, to mortify and rot; especially if you come suddenly to fire, after you have been in the air abroad, they are sure to moulder and dissolve. They use for remedy, as is said, washing in snow water.

If a man come out of a bitter cold suddenly to the fire, he is ready to swoon, or be overcome.

So contrariwise at Nova Zembla, when they opened their door at times to go forth, he that opened the door was in danger to be overcome.

The quantity of fish in the cold countries, Norway, etc. very abundant.

The quantity of fowl and eggs laid in the cliffs in great abundance.

In Nova Zembla they found no beasts but bears and foxes, whereof the bears gave over to be seen about September, and the foxes began.

Meat will keep from putrifying longer in frosty weather, than at other times.

In Iceland they keep fish, by exposing it to the cold, from putrifying without salt.

The nature of man endureth the colds in the countries of Scricfinnia, Biarmia, Lappia, Iceland, Greenland; and that not by perpetual keeping in stoves in the winter time, as they do in Russia: but contrariwise, their chief fairs and intercourse is written to be in the winter, because the ice evens and levelleth the passages of waters, plashes, etc.

A thaw after a frost doth greatly rot and mellow the ground.

Extreme cold hurteth the eyes, and causeth blindness in many beasts, as is reported.

The cold maketh any solid substance, as wood, stone, metal, put to the flesh, to cleave to it, and to pull the flesh after it, and so put to any cloth that is moist.

Cold maketh the pilage of beasts more thick and long, as foxes of Muscovy, sables, etc.

Cold maketh the pilage of most beasts incline to grayness or whiteness, as foxes, bears, and so the plumage of fowls; and maketh also the crests of cocks and their feet white, as is reported.

Extreme cold will make nails leap out of the walls, and out of locks, and the like.

Extreme cold maketh leather to be stiff like horn.

In frosty weather the stars appear clearest and most sparkling.

In the change from frost to open weather, or from open weather to frosts, commonly great mists.

In extreme colds any thing never so little which arresteth the air maketh it to congeal; as we see in cobwebs in windows, which is one of the least and weakest threads that is, and yet drops gather about it like chains of pearl.

So in frosts, the inside of glass windows gathereth a dew; *Qu.* if not more without.

Qu. Whether the sweating of marble and stones be in frost, or towards rain.

Oil in time of frost gathereth to a substance, as of

tallow; and it is said to sparkle some time, so as it giveth a light in the dark.

The countries which lie covered with snow, have a hastier maturation of all grain than in other countries, all being within three months, or thereabouts.

Qu. It is said, that compositions of honey, as mead, do ripen, and are most pleasant in the great colds.

The frosts with us are casual, and not tied to any months, so as they are not merely caused by the recess of the sun, but mixed with some inferior causes. In the inland of the northern countries, as in Russia, the weather for the three or four months of November, December, January, February, is constant, viz. clear and perpetual frost, without snows or rains.

There is nothing in our region, which, by approach of a matter hot, will not take heat by transition or excitation.

There is nothing hot here with us but is in a kind of consumption, if it carry heat in itself; for all fired things are ready to consume; chafed things are ready to fire; and the heat of mens bodies needeth aliment to restore.

The transition of heat is without any imparting of substance, and yet remaineth after the body heated is withdrawn; for it is not like smells, for they leave some airs or parts; not like light, for that abideth not when the first body is removed; not unlike to the motion of the loadstone, which is lent without adhesion of substance, for if the iron be filed where it was rubbed, yet it will draw or turn.

PHYSIOLOGICAL REMAINS.

Inquisitions touching the compounding of metals.

To make proof of the incorporation of iron with flint, or other stone. For if it can be incorporated without over-great charge, or other incommodity, the cheapness of the flint or stone doth make the compound stuff profitable for divers uses. The doubts may be three in number.

First, Whether they will incorporate at all, otherwise than to a body that will not hold well together, but become brittle and uneven?

Secondly, Although it should incorporate well, yet whether the stuff will not be so stubborn as it will not work well with a hammer, whereby the charge in working will overthrow the cheapness of the material?

Thirdly, Whether they will incorporate, except the iron and stone be first calcined into powder? And if not, whether the charge of the calcination will not eat out the cheapness of the material?

The uses are most probable to be; first for the implements of the kitchen; as spits, ranges, cobirons, pots, etc. then for the wars, as ordnance, portcullises, grates, chains, etc.

Note; the finer works of iron are not so probable to be served with such a stuff; as locks, clocks, small chains, etc. because the stuff is not like to be tough enough.

For the better use, in comparison of iron, it is like the stuff will be far lighter: for the weight of iron to flint is double and a third part; and, secondly, it is like to rust not so easily, but to be more clean.

The ways of trial are two: first, by the iron and stone of themselves, wherein it must be inquired, what are the stones that do easiliest melt. Secondly, with an additament, wherein brimstone is approved to help to the melting of iron or steel. But then it must be

considered, whether the charge of the additament will not destroy the profit.

It must be known also, what proportion of the stone the iron will receive to incorporate well with it, and that with once melting; for if either the proportion be too small, or that it cannot be received but piecemeal by several meltings, the work cannot be of value.

To make proof of the incorporating of iron and brass. For the cheapness of the iron in comparison of the brass, if the uses may be served, doth promise profit. The doubt will be touching their incorporating; for that it is approved, that iron will not incorporate, neither with brass nor other metals, of itself, by simple fire: so as the inquiry must be upon the calcination, and the additament, and the charge of them.

The uses will be for such things as are now made of brass, and might be as well served by the compound stuff; wherein the doubts will be chiefly of the toughness, and of the beauty.

First, therefore, if brass ordnance could be made of the compound stuff, in respect of the cheapness of the iron, it would be of great use.

The vantage which brass ordnance hath over iron, is chiefly, as I suppose, because it will hold the blow, though it be driven far thinner than the iron can be; whereby it saveth both in the quantity of the material, and in the charge and commodity of mounting and carriage, in regard, by reason of the thinness, it beareth much less weight: there may be also somewhat in being not so easily over-heated.

Secondly, for the beauty. Those things wherein the beauty or lustre are esteemed, are andirons, and all manner of images, and statues, and columns, and tombs, and the like. So as the doubt will be double for the beauty; the one, whether the colour will please so well, because it will not be so like gold as brass? The other, whether it will polish so well? Wherein for the latter it is probable it will; for steel glosses are more resplendent than the like plates of brass would be; and so is the glittering of a blade. And besides, I take it, andiron brass, which they call white brass, hath some

mixture of tin to help the lustre. And for the golden colour, it may be by some small mixture of orpiment, such as they use to brass in the yellow alchemy; it will easily recover that which the iron loseth. Of this the eye must be the judge upon proof made.

But now for pans, pots, curfews, counters, and the like, the beauty will not be so much respected, so as the compound stuff is like to pass.

For the better use of the compound stuff, it will be sweeter and cleaner than brass alone, which yieldeth a smell or soiliness; and therefore may be better for the vessels of the kitchen and brewing. It will also be harder than brass, where hardiness may be required.

For the trial, the doubts will be two: first, the overweight of brass towards iron, which will make iron float on the top in the melting. This perhaps will be holpen with the calaminar stone, which consenteth so well with brass, and, as I take it, is lighter than iron. The other doubt will be the stiffness and dryness of iron to melt; which must be holpen either by moistening the iron, or opening it. For the first, perhaps some mixture of lead will help. Which is as much more liquid than brass, as iron is less liquid. The opening may be holpen by some mixture of sulphur: so as the trials would be with brass, iron, calaminar stone, and sulphur; and then again with the same composition, and an addition of some lead; and in all this the charge must be considered, whether it eat not out the profit of the cheapness of iron?

There be two proofs to be made of incorporation of metals for magnificence and delicacy. The one for the eye, and the other for the ear. Statue-metal, and bell-metal, and trumpet-metal, and string-metal; in all these, though the mixture of brass or copper should be dearer than the brass itself, yet the pleasure will advance the price to profit.

First therefore for statue-metal, see Pliny's mixtures, which are almost forgotten, and consider the charge.

Try likewise the mixture of tin in large proportion with copper, and observe the colour and beauty, it being polished. But chiefly let proof be made of the incor-

porating of copper or brass with glass-metal, for that is cheap, and is like to add a great glory and shining.

For bell-metal. First, it is to be known what is the composition which is now in use. Secondly, it is probable that it is the dryness of the metal that doth help the clearness of the sound, and the moistness that dulleth it; and therefore the mixtures that are probable, are steel, tin, glass-metal.

For string-metal, or trumpet-metal, it is the same reason; save that glass-metal may not be used, because it will make it too brittle; and trial may be made with mixture of silver, it being but a delicacy, with iron or brass.

To make proof of the incorporation of silver and tin in equal quantity, or with two parts silver and one part tin, and to observe whether it be of equal beauty and lustre with pure silver; and also whether it yield no soiliness more than silver? And again, whether it will endure the ordinary fire which belongeth to chaffing-dishes, posnets, and such other silver vessels? And if it do not endure the fire, yet whether by some mixture of iron it may not be made more fixed? For if it be in beauty and all the uses aforesaid equal to silver, it were a thing of singular profit to the state, and to all particular persons, to change silver plate or vessel into the compound stuff, being a kind of silver electre, and to turn the rest into coin. It may be also questioned, whether the compound stuff will receive gilding as well as silver, and with equal lustre? It is to be noted, that the common allay of silver coin is brass, which doth discolour more, and is not so neat as tin.

The drownings of metals within other metals, in such sort as they can never rise again, is a thing of great profit. For if a quantity of silver can be so buried in gold, as it will never be reduced again, neither by fire, nor parting waters, nor otherways: and also that it serve all uses as well as pure gold, it is in effect all one as if so much silver were turned into gold; only the weight will discover it; yet that taketh off but half of the profit; for gold is not fully double weight to silver, but gold is twelve times price to silver.

The burial must be by one of these two ways, either by the smallness of the proportion, as perhaps fifty to one, which will be but six-pence gains in fifty shillings; or it must be holpen by somewhat which may fix the silver, never to be restored or vapoured away, when it is incorporated into such a mass of gold; for the less quantity is ever the harder to sever: and for this purpose iron is the likest, or coppel stuff, upon which the fire hath no power of consumption.

The making of gold seemeth a thing scarcely possible; because gold is the heaviest of metals, and to add matter is impossible: and again, to drive metals into a narrower room than their natural extent beareth, is a condensation hardly to be expected. But to make silver seemeth more easy, because both quicksilver and lead are weightier than silver; so as there needeth only fixing, and not condensing. The degree unto this that is already known, is infusing of quicksilver in a parchment, or otherwise, in the midst of molten lead when it cooleth; for this stupifieth the quicksilver that it runneth no more. This trial is to be advanced three ways. First, by iterating the melting of the lead, to see whether it will not make the quicksilver harder and harder. Secondly, to put realgar hot into the midst of the quicksilver, whereby it may be condensed, as well from within as without. Thirdly, to try it in the midst of molten iron, or molten steel, which is a body more likely to fix the quicksilver than lead. It may be also tried, by incorporating powder of steel, or coppel dust, by pouncing, into the quicksilver, and so to proceed to the stupifying.

Upon glass four things would be put in proof. The first, means to make the glass more crystalline. The second, to make it more strong for falls, and for fire, though it come not to the degree to be malleable. The third, to make it coloured by tinctures, comparable to or exceeding precious stones. The fourth, to make a compound body of glass and galletyle; that is, to have the colour milky like a chalcedon, being a stuff between a porcelane and a glass.

For the first, it is good first to know exactly the

several materials whereof the glass in use is made; window-glass, Normandy and Burgundy, ale-house glass, English drinking-glass: and then thereupon to consider what the reason is of the coarseness or clearness; and from thence to rise to a consideration how to make some additaments to the coarser materials, to raise them to the whiteness and crystalline splendor of the finest.

For the second, we see pebbles, and some other stones, will cut as fine as crystal, which if they will melt, may be a mixture for glass, and may make it more tough and more crystalline. Besides, we see metals will vitrify; and perhaps some portion of the glass of metal vitrified, mixed in the pot of ordinary glass-metal, will make the whole mass more tough.

For the third, it were good to have of coloured window-glass, such as is coloured in the pot, and not by colours———

It is to be known of what stuff galletyle is made, and how the colours in it are varied; and thereupon to consider how to make the mixture of glass-metal and them, whereof I have seen the example.

Inquire what be the stones that do easiliest melt. Of them take half a pound, and of iron a pound and half, and an ounce of brimstone, and see whether they will incorporate, being whole, with a strong fire. If not, try the same quantities calcined: and if they will incorporate, make a plate of them, and burnish it as they do iron.

Take a pound and a half of brass, and half a pound of iron; two ounces of the calaminar stone, an ounce and an half of brimstone, an ounce of lead; calcine them, and see what body they make; and if they incorporate, make a plate of it burnished.

Take of copper an ounce and a half, of tin an ounce, and melt them together, and make a plate of them burnished.

Take of copper an ounce and a half, of tin an ounce, of glass-metal half an ounce; stir them well in the boiling, and if they incorporate, make a plate of them burnished.

Take of copper a pound and a half, tin four ounces, brass two ounces; make a plate of them burnished.

Take of silver two ounces, tin half an ounce; make a little say-cup of it, and burnish it.

To inquire of the materials of every of the kind of glasses, coarser and finer, and of the proportions.

Take an equal quantity of glass-metal, of stone calcined, and bring a pattern.

Take an ounce of vitrified metal, and a pound of ordinary glass-metal, and see whether they will incorporate, and bring a pattern.

Bring examples of all coloured glasses, and learn the ingredients whereby they are coloured.

Inquire of the substance of galletyle.

ARTICLES OF QUESTIONS

TOUCHING

MINERALS.

THE LORD BACON'S QUESTIONS,

WITH

DR. MEVEREL'S SOLUTIONS.

Concerning the compounding, incorporating, or union of metals or minerals. Which subject is the first letter of his Lordship's Alphabet.

WITH what metals gold will incorporate by simple colliquefaction, and with what not? And in what quantity it will incorporate; and what kind of body the compound makes?

Gold with silver, which was the ancient *electrum:* gold with quicksilver: gold with lead: gold with copper: gold with brass: gold with iron: gold with tin.

So likewise of silver: silver with quicksilver: silver with lead: silver with copper: silver with brass: silver with iron: Plinius secund. lib. xxxiii. 9. "Miscuit denario triumvir Antonius ferrum," silver with tin.

So likewise of quicksilver: quicksilver with lead: quicksilver with copper: quicksilver with brass: quicksilver with iron: quicksilver with tin.

So of lead: lead with copper: lead with brass: lead with iron: lead with tin. Plin. xxxiv. 9.

So of copper: copper with brass: copper with iron: copper with tin.

So of brass: brass with iron: brass with tin.

So of iron: iron with tin.

What be the compound metals that are common and known? And what are the proportions of their mixtures? As,

Latten of brass, and the calaminar stone.

Pewter of tin and lead.

Bell-metal of etc. and the counterfeit plate, which they call alchemy.

The decomposites of three metals or more, are too long to inquire of, except there be some compositions of them already observed.

It is also to be observed, whether any two metals, which will not mingle of themselves, will mingle with the help of another; and what.

What compounds will be made of metal with stone and other fossils; as latten is made with brass and the calaminar stone; as all the metals incorporate with vitriol; all with iron powdered; all with flint, etc.

Some few of these would be inquired of, to disclose the nature of the rest.

Whether metals or other fossils will incorporate with molten glass, and what body it makes?

The quantity in the mixture would be well considered; for some small quantity perhaps will incorporate, as in the allays of gold and silver coin.

Upon the compound body, three things are chiefly to be observed: the colour; the fragility or pliantness; the volatility or fixation, compared with the simple bodies.

For present use or profit, this is the rule: consider the price of the two simple bodies; consider again the dignity of the one above the other in use; then see if you can make a compound, that will save more in price, than it will lose in dignity of the use.

As for example; consider the price of brass ordnance; consider again the price of iron ordnance, and then consider wherein the brass ordnance doth excel the iron ordnance in use; then if you can make a compound of brass and iron that will be near as good in use, and much cheaper in price, then there is profit both to the private and the commonwealth. So of gold and silver, the price is double of twelve: the dignity of gold above silver is not much, the splendour is alike, and more pleasing to some eyes, as in cloth of silver, silvered rapiers, etc. The main dignity is, that gold bears the fire, which silver doth not: but that is an excellency in nature, but it is nothing at all in use; for any dignity in use I know none, but that silvering will sully and canker more

than gilding; which if it might be corrected with a little mixture of gold, there is profit: and I do somewhat marvel that the latter ages have lost the ancient *electrum*, which was a mixture of silver with gold: whereof I conceive there may be much use, both in coin, plate, and gilding.

It is to be noted, that there is in the version of metals impossibility, or at least great difficulty, as in making of gold, silver, copper. On the other side, in the adulterating or counterfeiting of metals, there is deceit and villany. But it should seem there is a middle way, and that is by new compounds, if the ways of incorporating were well known.

What incorporation or imbibition metals will receive from vegetables, without being dissolved in their substance: as when the armourers make their steel more tough and pliant, by aspersion of water or juice of herbs; when gold being grown somewhat churlish by recovering, is made more pliant by throwing in shreds of tanned leather, or by leather oiled.

Note, that in these and like shews of imbibition, it were good to try by the weights, whether the weight be increased, or no; for if it be not, it is to be doubted that there is no imbibition of substance, but only that the application of that other body doth dispose and invite the metal to another posture of parts, than of itself it would have taken.

After the incorporation of metals by simple colliquefaction, for the better discovery of the nature and consents and dissents of metals, it would be likewise tried by incorporating of their dissolutions. What metals being dissolved in strong waters will incorporate well together, and what not? Which is to be inquired particularly, as it was in colliquefactions.

There is to be observed in those dissolutions which will not easily incorporate, what the effects are: as the bullition; the precipitation to the bottom; the ejaculation towards the top; the suspension in the midst: and the like.

Note, that the dissents of the menstrual or strong waters may hinder the incorporation, as well as the dis-

sents of the metals themselves; therefore where the menstrua are the same, and yet the incorporation followeth not, you may conclude the dissent is in the metals; but where the menstrua are several, not so certain.

Dr. Meverel's answers to the foregoing questions, concerning the compounding, incorporating, or union of metals and minerals.

Gold will incorporate with silver in any proportion Plin. lib. xxxiii. cap. 4.—"Omni auro inest argentum vario pondere; alibi dena, alibi nona, alibi octava parte —Ubicunque quinta argenti portio invenitur, electrum vocatur." The body remains fixt, solid, and coloured, according to the proportion of the two metals.

Gold with quicksilver easily mixeth, but the product is imperfectly fixed; and so are all other metals incorporate with mercury.

Gold incorporates with lead in any proportion.

Gold incorporates with copper in any proportion, the common allay.

Gold incorporates with brass in any proportion. And what is said of copper is true of brass, in the union of other metals.

Gold will not incorporate with iron.

Gold incorporates with tin, the ancient allay, Isa. i. 25.

What was said of gold and quicksilver, may be said of quicksilver and the rest of metals.

Silver with lead in any proportion.

Silver incorporates with copper. Pliny mentions such a mixture for *triumphales statuæ*, lib. xxxiii. 9. "Miscentur argento, tertia pars æris Cyprii tenuissimi, quod coronarium vocant, et sulphuris vivi quantum argenti." The same is true of brass.

Silver incorporates not with iron. Wherefore I wonder at that which Pliny hath, lib. xxxiii. 9. "Miscuit denario triumvir Antonius ferrum." And what is said of this is true of the rest; for iron incorporateth with none of them.

Silver mixes with tin.

Lead incorporates with copper. Such a mixture was

the pot metal whereof Pliny speaks, lib. xxxiv. 9. "Ternis aut quaternis libris plumbi argentarii in centenas æris additis."

Lead incorporates with tin. The mixture of these two in equal proportions, is that which was anciently called "plumbum argentarium," Plin. lib. xxxiv. 17.

Copper incorporates with tin. Of such a mixture were the mirrors of the Romans. Plin. "Atque ut omnia de speculis peragantur hoc loco, optima apud majores erant Brundusina, stanno et ære mistis." Lib xxxiii. 9.

Compound metals now in use.

1. Fine tin. The mixture is thus: pure tin a thousand pounds, temper fifty pounds, glass of tin three pounds.

2. Coarse pewter is made of fine tin and lead. Temper is thus made: the dross of pure tin, four pounds and a half; copper, half a pound.

3. Brass is made of copper and calaminaris.

4. Bell-metal. Copper, a thousand pounds; tin from three hundred to two hundred pounds; brass, a hundred and fifty pounds.

5. Pot-metal, copper and lead.

6. White alchemy is made of pan-brass one pound, and arsenicum three ounces.

7. Red alchemy is made of copper and auripigment.

There be divers imperfect minerals, which will incorporate with the metals: being indeed metals inwardly, but clothed with earths and stones: as pyritis, calaminaris, misy, chalcitis, sory, vitriolum.

Metals incorporate not with glass, except they be brought into the form of glass.

Metals dissolved. The dissolution of gold and silver disagree, so that in their mixture there is great ebullition, darkness, and in the end a precipitation of black powder.

The mixture of gold and mercury agree.

Gold agrees with iron. In a word, the dissolution of mercury and iron agree with all the rest.

Silver and copper disagree, and so do silver and lead. Silver and tin agree.

The second letter of the cross-row, touching the separation of metals and minerals.

Separation is of three sorts; the first is, the separating of the pure metal from the ore or dross, which we call refining. The second is, the drawing one metal or mineral out of another, which we call extracting. The third is, the separating of any metal into its original or *materia prima*, or element, or call them what you will; which work we will call principiation.

1. For refining, we are to inquire of it according to the several metals; as gold, silver, etc. Incidentally we are to inquire of the first stone, or ore, or spar, or marcasite of metals severally, and what kind of bodies they are, and of the degrees of richness. Also we are to inquire of the means of separating, whether by fire, parting waters, or otherwise. Also for the manner of refining, you are to see how you can multiply the heat, or hasten the opening, and so save the charge in the fining.

The means of this in three manners; that is to say, in the blast of the fire; in the manner of the furnace, to multiply heat by union and reflexion; and by some additament, or medicines which will help the bodies to open them the sooner.

Note, the quickning of the blast, and the multiplying of the heat in the furnace, may be the same for all metals; but the additaments must be several, according to the nature of the metals. Note again, that if you think that multiplying of the additaments in the same proportion that you multiply the ore, the work will follow, you may be deceived: for quantity in the passive will add more resistance, than the same quantity in the active will add force.

2. For extracting, you are to inquire what metals contain others, and likewise what not; as lead, silver; copper, silver, etc.

Note, although the charge of extraction should exceed the worth, yet that is not the matter: for at least it will discover nature and possibility, the other may be thought on afterwards.

We are likewise to inquire, what the differences are of those metals which contain more or less other metals, and how that agrees with the poorness or richness of the metals or ore in themselves. As the lead that contains most silver is accounted to be more brittle, and yet otherwise poorer in itself.

3. For principiation, I cannot affirm whether there be any such thing or not; and I think the chemists make too much ado about it: but howsoever it be, be it solution or extraction, or a kind of conversion by the fire; it is diligently to be inquired what salts, sulphur, vitriol, mercury, or the like simple bodies are to be found in the several metals, and in what quantity.

Dr. Meverel's answers to the foregoing questions, touching the separations of metals and minerals.

1. For the means of separating. After that the ore is washed, or cleansed from the earth, there is nothing simply necessary, save only a wind furnace well framed, narrow above and at the hearth, in shape oval, sufficiently fed with charcoal and ore, in convenient proportions.

For additions in this first separation, I have observed none; the dross the mineral brings being sufficient. The refiners of iron observe, that that iron-stone is hardest to melt which is fullest of metal, and that easiest which hath most dross. But in lead and tin the contrary is noted. Yet in melting of metals, when they have been calcined formerly by fire, or strong waters, there is good use of additaments, as of borax, tartar, armoniac, and salt-petre.

2. In extracting of metals. Note, that lead and tin contain silver. Lead and silver contain gold. Iron contains brass. Silver is best separated from lead by the test. So gold from silver. Yet the best way for that is aqua regia.

3. For principiation. I can truly and boldly affirm, that there are no such principals as sal, sulphur, and mercury, which can be separated from any perfect metals. For every part so separated, may easily be reduced into perfect metal without substitution of that, or those principles which chemists imagine to be wanting. As

suppose you take the salt of lead; this salt, or as some name it, sulphur, may be turned into perfect lead, by melting it with the like quantity of lead which contains principles only for itself.

I acknowledge that there is quicksilver and brimstone found in the imperfect minerals: but those are nature's remote materials, and not the chemist's principles. As if you dissolve antimony by aqua regia, there will be real brimstone swimming upon the water: as appears by the colour of the fire when it is burnt, and by the smell.

The third letter of the cross-row, touching the variation of metals into several shapes, bodies, or natures, the particulars whereof follow.

Tincture: turning to rust: calcination: sublimation: precipitation: amalgamatizing, or turning into a soft body: vitrification: opening or dissolving into liquor: sproutings, or branchings, or arborescents: induration and mollification: making tough or brittle: volatility and fixation: transmutation, or version.

For tincture: it is to be inquired how metal may be tinged through and through, and with what, and into what colours; as tinging silver yellow, tinging copper white, and tinging red, green, blue; especially with keeping the lustre.

Item, tincture of glasses.

Item, tincture of marble, flint, or other stone.

For turning into rust, two things are chiefly to be inquired; by what corrosives it is done, and into what colours it turns; as lead into white, which they call ceruss; iron into yellow, which they call crocus martis; quicksilver into vermilion; brass into green, which they call verdegrease.

For calcination; how every metal is calcined, and into what kind of body, and what is the exquisitest way of calcination.

For sublimation; to inquire the manner of subliming, and what metals endure subliming, and what body the sublimate makes.

For precipitation likewise; by what strong water every

metal will precipitate, and with what additaments, and in what time, and into what body.

So for amalgama; what metals will endure it, what are the means to do it, and what is the manner of the body.

For vitrification likewise; what metals will endure it, what are the means to do it, into what colour it turns; and farther, where the whole metal is turned into glass, and where the metal doth but hang in the glassy parts; also what weight the vitrified body bears, compared with the crude body; also because vitrification is accounted a kind of death of metals, what vitrification will admit of turning back again, and what not.

For dissolution into liquor, we are to inquire what is the proper menstruum to dissolve any metal, and in the negative, what will touch upon the one and not upon the other, and what several menstrua will dissolve any metal, and which most exactly. Item, the process or motion of the dissolution, the manner of rising, boiling, vapouring more violent, or more gentle, causing much heat or less. Item, the quantity or charge that the strong water will bear, and then give over. Item, the colour into which the liquor will turn. Above all, it is to be inquired, whether there be any menstruum to dissolve any metal that is not fretting, or corroding; and openeth the body by sympathy, and not by mordacity or violent penetration.

For sprouting or branching, though it be a thing but transitory, and a kind of toy or pleasure, yet there is a more serious use of it: for that it discovereth the delicate motions of spirits, when they put forth and cannot get forth, like unto that which is in vegetables.

For induration, or mollification; it is to be inquired what will make metals harder and harder, and what will make them softer and softer. And this inquiry tendeth to two ends: first, for use; as to make iron soft by the fire makes it malleable. Secondly, because induration is a degree towards fixation, and mollification towards volatility; and therefore the inquiry of them will give light towards the other.

For tough and brittle, they are much of the same kind, but yet worthy of an inquiry apart, especially to

join hardness with toughness, as making glass malleable, etc. and making blades strong to resist and pierce, and yet not easy to break.

For volatility and fixation. It is a principal branch to be inquired: the utmost degree of fixation is that whereon no fire will work, nor strong water joined with fire, if there be any such fixation possible. The next is, when fire simply will not work without strong waters. The next is by the test. The next is when it will endure fire not blown, or such a strength of fire. The next is when it will not endure, but yet is malleable. The next is when it is not malleable, but yet is not fluent, but stupified. So of volatility, the utmost degree is when it will fly away without returning. The next is when it will fly up, but with ease return. The next is when it will fly upwards over the helm by a kind of exsufflation without vapouring. The next is when it will melt though not rise. The next is when it will soften though not melt. Of all these diligent inquiry is to be made in several metals, especially of the more extreme degrees.

For transmutation or version. If it be real and true, it is the farthest part of art, and would be well distinguished from extraction, from restitution, and from adulteration. I hear much of turning iron into copper; I hear also of the growth of lead in weight, which cannot be without a conversion of some body into lead: but whatsoever is of this kind, and well expressed, is diligently to be inquired and set down.

Dr. Meverel's answers to the foregoing questions, concerning the variation of metals and minerals.

1. For tinctures, there are none that I know, but that rich variety which springs from mixture of metals with metals, or imperfect minerals.

2. The imperfect metals are subject to rust, all of them except mercury, which is made into vermilion by solution, or calcination. The rest are rusted by any salt, sour, or acid water. Lead into a white body called *cerussa.* Iron into a pale red called *ferrugo.* Copper is turned into green, named *ærugo, æs viride.* Tin

into white: but this is not in use, neither hath it obtained a name.

The Scriptures mention the rust of gold, but that is in regard of the allay.

3. Calcination. All metals may be calcined by strong waters, or by admixtion of salt, sulphur, and mercury. The imperfect metals may be calcined by continuance of simple fire; iron thus calcined is called *crocus martis.*

And this is their best way. Gold and silver are best calcined by mercury. Their colour is grey. Lead calcined is very red. Copper dusky red.

4. Metals are sublimed by joining them with mercury or salts. As silver with mercury, gold with sal armoniac, mercury with vitriol.

5. Precipitation is, when any metal being dissolved into a strong water, is beaten down into a powder by salt water. The chiefest in this kind is oil of tartar.

6. Amalgamation is the joining or mixing of mercury with any other of the metals. The manner is this in gold, the rest are answerable: take six parts of mercury, make them hot in a crucible, and pour them to one part of gold made red hot in another crucible, stir these well together that they may incorporate; which done, cast the mass into cold water and wash it. This is called the amalgama of gold.

7. For vitrification. All the imperfect metals may be turned by strong fire into glass, except mercury; iron into green; lead into yellow; brass into blue; tin into pale yellow. For gold and silver I have not known them vitrified, except joined with antimony. These glassy bodies may be reduced into the form of mineral bodies.

8. Dissolution. All metals without exception may be dissolved.

(1.) Iron may be dissolved by any tart, salt, or vitriolated water; yea, by common water, if it be first calcined with sulphur. It dissolves in aqua fortis with great ebullition and heat, into a red liquor, so red as blood.

(2.) Lead is fittest dissolved in vinegar, into a pale yellow, making the vinegar very sweet.

(3.) Tin is best dissolved with distilled salt water. It retains the colour of the menstruum.

(4.) Copper dissolves as iron doth, in the same liquor, into a blue.

(5.) Silver hath its proper menstruum, which is aqua fortis. The colour is green, with great heat and ebullition.

(6.) Gold is dissolved with aqua regia, into a yellow liquor, with little heat or ebullition.

(7.) Mercury is dissolved with much heat and boiling, into the same liquors which gold and silver are. It alters not the colour of the menstruum.

Note. Strong waters may be charged with half their weight of fixed metals, and equal of mercury; if the workman be skilful.

9. Sprouting. This is an accident of dissolution. For if the menstruum be overcharged, then within short time the metals will shoot into certain crystals.

10. For induration, or mollification, they depend upon the quantity of fixed mercury and sulphur. I have observed little of them, neither of toughness nor brittleness.

11. The degrees of fixation and volatility I acknowledge, except the two utmost, which never were observed.

12. The question of transmutation is very doubtful. Wherefore I refer your honour to the fourth tome of "Theatrum Chymicum:" and there, to that tract which is intitled "Disquisitio Heliana;" where you shall find full satisfaction.

The fourth letter of the cross-row, touching restitution.

First, therefore, it is to be inquired in the negative, what bodies will never return, either by their extreme fixings, as in some vitrifications, or by extreme volatility.

It is also to be inquired of the two means of reduction; and first by the fire, which is but by congregation of homogeneal parts.

The second is, by drawing them down by some body

that hath consent with them. As iron draweth down copper in water; gold draweth quicksilver in vapour; whatsoever is of this kind, is very diligently to be inquired.

Also it is to be inquired what time, or age, will reduce without help of fire or body.

Also it is to be inquired what gives impediment to union or restitution, which is sometimes called mortification; as when quicksilver is mortified with turpentine, spittle, or butter.

Lastly, it is to be inquired, how the metal restored, differeth in any thing from the metal rare: as whether it become not more churlish, altered in colour, or the like.

Dr. Meverel's answers touching the restitutions of metals and minerals.

Reduction is chiefly effected by fire, wherein if they stand and nele, the imperfect metals vapour away, and so do all manner of salts which separated them *in minimas partes* before.

Reduction is singularly holpen, by joining store of metal of the same nature with it in the melting.

Metals reduced are somewhat churlish, but not altered in colour.

THE LORD VERULAM'S INQUISITION

Concerning the versions, transmutations, multiplications, and effections of bodies.

EARTH by fire is turned into brick, which is of the nature of a stone, and serveth for building, as stone doth: and the like of tile. Qu. the manner.

Naphtha, which was the bituminous mortar used in the walls of Babylon, grows to an intire and very hard matter like a stone.

In clay countries, where there is pebble and gravel, you shall find great stones, where you may see the pebbles or gravel, and between them a substance of stone as hard or harder than the pebble itself.

There are some springs of water, wherein if you put wood, it will turn into the nature of stone: so as that

within the water shall be stone, and that above the water continue wood.

The slime about the reins and bladder in man's body turns into stone: and stone is likewise found often in the gall; and sometimes, though rarely, in vena porta.

Query, what time the substance of earth in quarries asketh to be turned into stone?

Water, as it seems, turneth into crystal, as is seen in divers caves, where the crystal hangs in stillicidiis.

Try wood, or the stalk of herbs, buried in quicksilver, whether it will not grow hard and stony.

They speak of a stone ingendered in a toad's head.

There was a gentleman, digging in his moat, found an egg turned into stone, the white and the yolk keeping their colour, and the shell glistering like a stone cut with corners.

Try some things put into the bottom of a well; as wood, or some soft substance: but let it not touch the water, because it may not putrify.

They speak, that the white of an egg, with lying long in the sun, will turn stone.

Mud in water turns into shells of fishes, as in horse-mussels, in fresh ponds, old and overgrown. And the substance is a wondrous fine substance, light and shining.

A SPEECH TOUCHING THE RECOVERING OF DROWNED MINERAL WORKS,

*Prepared for the parliament (as Mr. Bushel affirmed) by the Viscount of St. Albans, then Lord High Chancellor of England.**

MY LORDS AND GENTLEMEN,

THE king, my royal master, was lately graciously pleased to move some discourse to me concerning Mr. Sutton's hospital, and such like worthy foundations of memorable piety: which humbly seconded by myself, drew his majesty into a serious consideration of the mineral treasures of his own territories, and the practical discoveries of them by way of my philosophical theory: which he then so well resented, that afterwards,

* See Mr. Bee's extract, p. 18, 19.

upon a mature digestion of my whole design, he commanded me to let your lordships understand, how great an inclination he hath to further so hopeful a work, for the honour of his dominions, as the most probable means to relieve all the poor thereof, without any other stock or benevolence, than that which divine bounty should confer on their own industries and honest labours, in recovering all such drowned mineral works, as have been, or shall be therefore deserted.

And, my lords, all that is now desired of his majesty and your lordships, is no more than a gracious act of this present parliament to authorise them herein, adding a mercy to a munificence, which is, the persons of such strong and able petty felons, who, in true penitence for their crimes, shall implore his majesty's mercy and permission to expiate their offences by their assiduous labours in so innocent and hopeful a work.

For by this unchargeable way, my lords, have I proposed to erect the academical fabric of this island's Solomon's House, modelled in my new Atlantis. And I can hope, my lords, that my midnight studies, to make our countries flourish and outvie European neighbours in mysterious and beneficent arts, have not so ingratefully affected your noble intellects, that you will delay or resist his majesty's desires, and my humble petition in this benevolent, yea, magnificent affair; since your honourable posterities may be enriched thereby, and my ends are only to make the world my heir, and the learned fathers of my Solomon's House, the successive and sworn trustees in the dispensation of this great service, for God's glory, my prince's magnificence, this parliament's honour, our country's general good, and the propagation of my own memory.

And I may assure your lordships, that all my proposals in order to this great architype, seemed so rational and feasible to my royal sovereign, our Christian Solomon, that I thereby prevailed with his majesty to call this honourable parliament, to confirm and impower me in my own way of mining, by an act of the same, after his majesty's more weighty affairs were considered in your wisdoms; both which he desires your lordships,

and you gentlemen that are chosen as the patriots of your respective countries, to take speedy care of: which done, I shall not then doubt the happy issue of my undertakings in this design, whereby concealed treasures, which now seem utterly lost to mankind, shall be confined to so universal a piety, and brought into use by the industry of converted penitents, whose wretched carcases the impartial laws have, or shall dedicate, as untimely feasts, to the worms of the earth, in whose womb those deserted mineral riches must ever lie buried as lost abortments, unless those be made the active midwives to deliver them. For, my lords, I humbly conceive them to be the fittest of all men to effect this great work, for the ends and causes which I have before expressed.

All which, my lords, I humbly refer to your grave and solid judgments to conclude of, together with such other assistances to this frame, as your own oraculous wisdom shall intimate, for the magnifying our Creator in his inscrutable providence, and admirable works of nature.

Certain experiments made by the Lord BACON *about weight in air and water.*

A new sovereign of equal weight in the air to the piece in brass, overweigheth in the water nine grains: in three sovereigns the difference in the water is but twenty-four grains.

The same sovereign overweigheth an equal weight of lead, four grains in the water, in brass grains for gold: in three sovereigns about eleven grains.

The same sovereign overweigheth an equal weight of stones in the air, at least sixty-five grains in the water: the grains being for the weight of gold in brass metal.

A glass filled with water weighing, in Troy weights, thirteen ounces and five drams, the glass and the water together weigheth severally, viz. the water nine ounces and a half, and the glass four ounces and a dram.

A bladder weighing two ounces seven drams and a half, a pebble laid upon the top of the bladder makes three ounces six drams and a half, the stone weigheth seven drams.

The bladder, as above, blown, and the same fallen, weigheth equal.

A sponge dry weigheth one ounce twenty-six grains: the same sponge being wet, weigheth fourteen ounces six drams and three quarters: the water weigheth in several eleven ounces one dram and a half, and the sponge three ounces and a half, and three quarters of a dram. First time.

The sponge and water together weigh fifteen ounces and seven drams: in several, the water weigheth eleven ounces and seven drams, and the sponge three ounces seven drams and a half. Second time.

Three sovereigns made equal to a weight in silver in the air, differ in the water.

For false weights, one beam long, the other thick.

The stick and thread weigh half a dram, and twenty grains, being laid in the balance.

The stick tied to reach within half an inch of the end of the beam, and so much from the tongue, weigheth twenty-eight grains; the difference is twenty-two grains.

The same stick being tied to hang over the end of the beam an inch and a half, weigheth half a dram and twenty-four grains, exceeding the weight of the said stick in the balance by four grains.

The same stick being hanged down beneath the thread, as near the tongue as is possible, weigheth only eight grains.

Two weights of gold being made equal in the air, and weighing severally seven drams; the one balance being put into the water, and the other hanging in the air, the balance in the water weigheth only five drams and three grains, and abateth of the weight in the air, one dram and a half, and twenty-seven grains.

The same trial being made the second time, and more truly and exactly betwixt gold and gold, weighing severally, as above; and making a just and equal weight in the air, the one balance being put into the water the depth of five inches, and the other hanging in the air, the balance in the water weigheth only four drams, and fifty-five grains, and abateth of the weight in the air two drams and five grains.

The trial being made betwixt lead and lead, weighing severally seven drams in the air, the balance in the water weigheth only four drams and forty-one grains, and abateth of the weight in the air two drams and nineteen grains; the balance kept the same depth in the water as abovesaid.

The trial being made betwixt silver and silver, weighing severally seven drams in the air, the balance in the water weigheth only four drams and twenty-five grains. So it abateth two drams and thirty-five grains; the same depth in the water observed.

In iron and iron, weighing severally each balance in the air seven drams, the balance in the water weigheth only four drams and eighteen grains; and abateth of the weight in the air two drams and forty-two grains; the depth observe as above.

In stone and stone, the same weight of seven drams equally in the air, the balance in the water weigheth only two drams and twenty-two grains; and abateth of the weight in the air four drams and thirty-eight grains; the depth as above.

In brass and brass, the same weight of seven drams in each balance, equal in the air, the balance in the water weigheth only four drams and twenty-two grains; and abateth in the water two drams and thirty-eight grains; the depth observed.

The two balances being weighed in air and water, the balance in the air over-weigheth the other in the water one dram and twenty-eight grains; the depth in the water as aforesaid.

It is a profitable experiment which sheweth the weights of several bodies in comparison with water. It is of use in lading of ships, and other bottoms, and may help to shew what burden in the several kinds they will bear.

Certain sudden thoughts of the Lord BACON'*s, set down by him under the title of* EXPERIMENTS FOR PROFIT.

Muck of leaves: muck of river, earth, and chalk: muck of earth closed, both for salt-petre and muck: setting of wheat and peas: mending of crops by steep-

ing of seeds: making peas, cherries, and strawberries come early: strengthening of earth for often returns of radishes, parsnips, turnips, etc. making great roots of onions, radishes, and other esculent roots: sowing of seeds of trefoil: setting of woad: setting of tobacco, and taking away the rawns: grafting upon boughs of old trees: making of a hasty coppice: planting of osiers in wet grounds: making of candles to last long: building of chimnies, furnaces, and ovens, to give heat with less wood: fixing of logwood: other means to make yellow and green fixed: conserving of oranges, lemons, citrons, pomegranates, etc. all summer: recovering of pearl, coral, turcoise colour, by a conservatory of snow: sowing of fennel: brewing with hay, haws, trefoil, broom, hips, bramble-berries, woodbines, wild thyme, instead of hops, thistles: multiplying and dressing artichokes.

Certain Experiments of the Lord BACON's, *about the commixture of liquors only, not solids, without heat or agitation, but only by simple composition and settling.*

Spirit of wine mingled with common water, although it be much lighter than oil, yet so as if the first fall be broken, by means of a sop, or otherwise, it stayeth above; and if it be once mingled, it severeth not again, as oil doth. Tried with water coloured with saffron.

Spirit of wine mingled with common water hath a kind of clouding, and motion shewing no ready commixture. Tried with saffron.

A dram of gold dissolved in aqua regis, with a dram of copper in aqua fortis, commixed, gave a green colour, but no visible motion in the parts. Note, that the dissolution of the gold was, twelve parts water to one part body: and of the copper was, six parts water to one part body.

Oil of almonds commixed with spirit of wine severeth, and the spirit of wine remaineth on the top, and the oil in the bottom.

Gold dissolved, commixed with spirit of wine, a dram of each, doth commix, and no other apparent alteration.

Quicksilver dissolved with gold dissolved, a dram of

each, doth turn to a mouldy liquor, black, and like smiths water.

Note, the dissolution of the gold was twelve parts water, *ut supra*, and one part metal: that of water was two parts, and one part metal.

Spirit of wine and quicksilver commixed, a dram of each, at the first shewed a white milky substance at the top, but soon after mingled.

Oil of vitriol commixed with oil of cloves, a dram of each, turneth into a red dark colour; and a substance thick almost like pitch: and upon the first motion gathereth an extreme heat, not to be endured by touch.

Dissolution of gold, and oil of vitriol commixed, a dram of each, gathereth a great heat at the first, and darkeneth the gold, and maketh a thick yellow.

Spirit of wine and oil of vitriol, a dram of each, hardly mingle; the oil of vitriol going to the bottom, and the spirit of wine lying above in a milky substance. It gathereth also a great heat, and a sweetness in the taste.

Oil of vitriol and dissolution of quicksilver, a dram of each, maketh an extreme strife, and casteth up a very gross fume, and after casteth down a white kind of curds, or sands; and on the top a slimish substance, and gathereth a great heat.

Oil of sulphur and oil of cloves commixed, a dram of each, turn into a thick and red-coloured substance; but no such heat as appeared in the commixture with the oil of vitriol.

Oil of petroleum and spirit of wine, a dram of each, intermingle otherwise than by agitation, as wine and water do; and the petroleum remaineth on the top.

Oil of vitriol and petroleum, a dram of each, turn into a mouldy substance, and gathereth some warmth; there residing a black cloud in the bottom, and a monstrous thick oil on the top.

Spirit of wine and red-wine vinegar, one ounce of each, at the first fall, one of them remaineth above, but by agitation they mingle.

Oil of vitriol and oil of almonds, one ounce of each, mingle not; but the oil of almonds remaineth above.

Spirit of wine and vinegar, an ounce of each, com-

mixed, do mingle, without any apparent separation, which might be in respect of the colour.

Dissolution of iron, and oil of vitriol, a dram of each, do first put a milky substance into the bottom, and after incorporate into a mouldy substance.

Spirit of wine commixed with milk, a third part spirit of wine, and two parts milk, coagulateth little, but mingleth; and the spirit swims not above.

Milk and oil of almonds mingled, in equal portions, do hardly incorporate, but the oil cometh above, the milk being poured in last; and the milk appeareth in some drops or bubbles.

Milk one ounce, oil of vitriol a scruple, doth coagulate; the milk at the bottom, where the vitriol goeth.

Dissolution of gum tragacanth, and oil of sweet almonds, do not commingle, the oil remaining on the top till they be stirred, and make the mucilage somewhat more liquid.

Dissolution of gum tragacanth one ounce and a half, with half an ounce of spirit of wine, being commixed by agitation, make the mucilage more thick.

The white of an egg with spirit of wine, doth bake the egg into clots, as if it began to poch.

One ounce of blood, one ounce of milk, do easily incorporate.

Spirit of wine doth curdle the blood.

One ounce of whey unclarified, one ounce of oil of vitriol, make no apparent alteration.

One ounce of blood, one ounce of oil of almonds, incorporate not, but the oil swims above.

Three quarters of an ounce of wax being dissolved upon the fire, and one ounce of oil of almonds put together and stirred, do not so incorporate, but that when it is cold the wax gathereth and swims upon the top of the oil.

One ounce of oil of almonds cast into an ounce of sugar seething, sever presently, the sugar shooting towards the bottom.

A catalogue of bodies attractive and not attractive, together with experimental observations about attraction.

These following bodies draw: amber, jet, diamond, sapphire, carbuncle, iris, the gem opale, amethyst, bristollina, crystal, clear glass, glass of antimony, divers flowers from mines, sulphur, mastic, hard sealing-wax, the harder rosin, arsenic.

These following bodies do not draw: smaragd, achates, corneolus, pearl, jaspis, chalcedonius, alabaster, porphyry, coral, marble, touchstone, hæmatites, or bloodstone; smyris, ivory, bones, ebon-tree, cedar, cypress, pitch, softer rosin, camphire, galbanum, ammoniac, storax, benzoin, loadstone, asphaltum.*

These bodies, gold, silver, brass, iron, draw not, though never so finely polished.

In winter, if the air be sharp and clear, sal gemmeum, roch allum, and lapis specularis, will draw.

These following bodies are apt to be drawn, if the mass of them be small: chaff, woods, leaves, stones, all metals leaved, and in the mine; earth, water, oil.

* The drawing of iron excepted.

MEDICAL REMAINS.

Grains of youth.

TAKE of nitre four grains, of ambergrease three grains, of orris-powder two grains, of white poppy-seed the fourth part of a grain, of saffron half a grain, with water of orange-flowers, and a little tragacanth; make them into small grains, four in number. To be taken at four a-clock, or going to bed.

Preserving ointments.

Take of deers suet one ounce, of myrrh six grains, of saffron five grains, of bay-salt twelve grains, of Canary wine, of two years old, a spoonful and a half. Spread it on the inside of your shirt, and let it dry, and then put it on.

A purge familiar for opening the liver.

Take rhubarb two drams, agaric trochiscat one dram and a half, steep them in claret wine burnt with mace; take of wormwood one dram, steep it with the rest, and make a mass of pills, with syrup. acetos. simplex. But drink an opening broth before it, with succory, fennel, and smallage roots, and a little of an onion.

Wine for the spirits.

Take gold perfectly refined three ounces, quench it six or seven times in good claret wine; add of nitre six grains for two draughts: add of saffron prepared three grains, of ambergrease four grains, pass it through an hippocras bag, wherein there is a dram of cinnamon gross beaten, or, to avoid the dimming of the colour, of ginger. Take two spoonfuls of this to a draught of fresh claret wine.

The preparing of saffron.

Take six grains of saffron, steeped in half parts of wine and rose water, and a quarter part vinegar: then dry it in the sun.

Wine against adverse melancholy, preserving the senses and the reason.

Take the roots of buglos well scraped and cleansed from their inner pith, and cut them into small slices; steep them in wine of gold extinguished *ut supra*, and add of nitre three grains, and drink it *ut supra*, mixed with fresh wine; the roots must not continue steeped above a quarter of an hour; and they must be changed thrice.

Breakfast preservative against the gout and rheums.

To take once in the month at least, and for two days together, one grain of castorei in my ordinary broth.

The preparation of garlic.

Take garlic four ounces, boil it upon a soft fire in claret wine, for half an hour. Take it out and steep it in vinegar; whereto add two drams of cloves, then take it forth, and keep it in a glass for use.

The artificial preparation of damask roses for smell.

Take roses, pull their leaves, then dry them in a clear day in the hot sun: then their smell will be as gone. Then cram them into an earthen bottle, very dry and sweet, and stop it very close; they will remain in smell and colour both fresher than those that are otherwise dried. Note, the first drying, and close keeping upon it, preventeth all putrefaction, and the second spirit cometh forth, made of the remaining moisture not dissipated.

A restorative drink.

Take of Indian maiz half a pound, grind it not too small, but to the fineness of ordinary meal, and then bolt and searce it, that all the husky part may be taken away. Take of eryngium roots three ounces, of dates as much, of enula two drams, of mace three drams,

and brew them with ten shilling beer to the quantity of four gallons: and this do, either by decocting them in a pottle of wort, to be after mingled with the beer, being new tapped, or otherwise infuse it in the new beer, in a bag. Use this familiarly at meals.

Against the waste of the body by heat.

Take sweet pomegranates, and strain them lightly, not pressing the kernel, into a glass; where put some little of the peel of a citron, and two or three cloves, and three grains of ambergrease, and a pretty deal of fine sugar. It is to be drunk every morning whilst pomegranates last.

Methusalem water. Against all asperity and torrefaction of inward parts, and all adustion of the blood, and generally against the dryness of age.

Take crevises very new, q. s. boil them well in claret wine; of them take only the shells, and rub them very clean, especially on the inside, that they may be thoroughly cleansed from the meat. Then wash them three or four times in fresh claret wine, heated: still changing the wine, till all the fish-taste be quite taken away. But in the wine wherein they are washed, steep some tops of green rosemary; then dry the pure shell thoroughly, and bring them to an exquisite powder. Of this powder take three drams. Take also pearl, and steep them in vinegar twelve hours, and dry off the vinegar; of this powder also three drams. Then put the shell powder and pearl powder together, and add to them of ginger one scruple, and of white poppy-seed half a scruple, and steep them in spirit of wine, wherein six grains of saffron have been dissolved, seven hours. Then upon a gentle heat vapour away all the spirit of wine, and dry the powder against the sun without fire. Add to it of nitre one dram, of ambergrease one scruple and a half; and so keep this powder for use in a clean glass. Then take a pottle of milk, and slice in it of fresh cucumbers, the inner pith only, the rind being pared off, four ounces, and draw forth a water by dis-

tillation. Take of claret wine a pint, and quench gold in it four times.

Of the wine, and of the water of milk, take of each three ounces, of the powder one scruple, and drink it in the morning; stir up the powder when you drink, and walk upon it.

A catalogue of astringents, openers, and cordials, instrumental to health.

ASTRINGENTS.

Red rose, black-berry, myrtle, plantane, flower of pomegranate, mint, aloes well washed, myrobalanes, sloes, agrestia fraga, mastich, myrrh, saffron, leaves of rosemary, rhubarb received by infusion, cloves, service-berries, corna, wormwood, bole armeniac, sealed earth, cinquefoil, tincture of steel, sanguis draconis, coral, amber, quinces, spikenard, galls, alum, blood-stone, mummy, amomum, galangal, cypress, ivy, psyllum, house-leek, sallow, mullein, vine, oak-leaves, lignum aloes, red sanders, mulberry, medlars, flowers of peach-trees, pomegranates, pears, palmule, pith of kernels, purslain, acacia, laudanum, tragacanth, thus olibani, comfrey, shepherd's purse, polygonium.

Astringents, both hot and cold, which corroborate the parts, and which confirm and refresh such of them as are loose or languishing.

Rosemary, mint, especially with vinegar, cloves, cinnamon, cardamom, lign-aloes, rose, myrtle, red sanders, cotonea, red wine, chalybeat wine, five-finger grass, plantane, apples of cypress, berberries, fraga, service-berries, cornels, ribes, sour pears, rambesia.

Astringents styptic, which by their styptic virtue may stay fluxes.

Sloes, acacia, rind of pomegranates infused, at least three hours, the styptic virtue not coming forth in lesser time. Allum, galls, juice of sallow, syrup of unripe quinces, balaustia, the whites of eggs boiled hard in vinegar.

Astringents, which by their cold and earthy nature may stay the motion of the humours tending to a flux.

Sealed earth, sanguis draconis, coral, pearls, the shell of the fish dactylus.

Astringents, which by the thickness of their substance stuff as it were the thin humours, and thereby stay fluxes.

Rice, beans, millet, cauls, dry cheese, fresh goats milk.

Astringents, which by virtue of their glutinous substance restrain a flux, and strengthen the looser parts.

Karabe,[1] mastich, spodium, hartshorn, frankincense, dried bulls pistle, gum tragacanth.

Astringents purgative, which, having by their purgative or expulsive power thrust out the humours, leave behind them astrictive virtue.

Rhubarb, especially that which is toasted against the fire: myrobalanes, tartar, tamarinds, an Indian fruit like green damascenes.

Astringents which do very much suck and dry up the humours, and thereby stay fluxes.

Rust of iron, crocus martis, ashes of spices.

Astringents, which by their nature do dull the spirits, and lay asleep the expulsive virtue, and take away the acrimony of all humours.

Laudanum, mithridate, diascordium, diacodium.

Astringents, which, by cherishing the strength of the parts, do comfort and confirm their retentive power.

A stomacher of scarlet cloth: whelps, or young healthy boys, applied to the stomach: hippocratic wines, so they may be made of austere materials.

OPENERS.

Succory, endive, betony, liverwort, petroselinum, smallage, asparagus, roots of grass, dodder, tamarisk,

[1] Perhaps he meant the fruit of Karobe.

juncus odoratus, lacca, cupparus, wormwood, chamæpitys, fumaria, scurvy-grass, eringo, nettle, ireos, elder, hyssop, aristolochia, gentian, costus, fennel root, maidenhair, harts-tongue, daffodilly, asarum, sarsaparilla, sassafras, acorns, abrotonum, aloes, agaric, rhubarb infused, onions, garlic, bother, squilla, sowbread, Indian nard, Celtic nard, bark of laurel-tree, bitter almonds, holy thistle, camomile, gun-powder, sows (millepedes) ammoniac, man's urine, rue, park leaves (vitex) centaury, lupines, chamædrys, costum, ammios, bistort, camphire, daucus seed, Indian balsam, scordium, sweet cane, galingal, agrimony.

CORDIALS.

Flowers of basil royal, flores caryophyllati, flowers of buglos and borage, rind of citron, orange flowers, rosemary and its flowers, saffron, musk, amber, folium, i. e. nardi folium, balm-gentle, pimpernel, gems, gold, generous wines, fragrant apples, rose, rosa moschata, cloves, lign-aloes, mace, cinnamon, nutmeg, cardamom, galingal, vinegar, kermes berry, herba moschata, betony, white sanders, camphire, flowers of heliotrope, penny royal, scordium, opium corrected, white pepper, nasturtium, white and red bean, castum dulce, dactylus, pine, fig, egg-shell, vinum malvaticum, ginger, kidneys, oisters, crevises, or river crabs, seed of nettle, oil of sweet almonds, sesaminum oleum, asparagus, bulbous roots, onions, garlic, eruca, daucus seed, eringo, siler montanus, the smell of musk, cynethi odor, caraway seed, flower of puls, aniseed, pellitory, anointing of the testicles with oil of elder in which pellitory hath been boiled, cloves with goats milk, olibanum.

An extract by the Lord Bacon, for his own use, out of the book Of the prolongation of life, together with some new advices in order to health.

1. Once in the week, or at least in the fortnight, to take the water of mithridate distilled, with three parts to one, or strawberry-water to allay it; and some grains of nitre and saffron, in the morning between sleeps.

2. To continue my broth with nitre; but to inter-

change it every other two days, with the juice of pomegranates expressed, with a little cloves, and rind of citron.

3. To order the taking of the maceration[1] as followeth.

To add to the maceration six grains of cremor tartari, and as much enula.

To add to the oxymel some infusion of fennel-roots in the vinegar, and four grains of angelica-seed, and juice of lemons, a third part to the vinegar.

To take it not so immediately before supper, and to have the broth specially made with barley, rosemary, thyme, and cresses.

Sometimes to add to the maceration three grains of tartar, and two of enula, to cut the more heavy and viscous humours; lest rhubarb work only upon the lightest.

To take sometimes the oxymel before it, and sometimes the Spanish honey simple.

4. To take once in the month at least, and for two days together, a grain and a half of castor, in my broth, and breakfast.

5. A cooling clyster to be used once a month, after the working of the maceration is settled.

Take of barley-water, in which the roots of bugloss are boiled, three ounces, with two drams of red sanders, and two ounces of raisins of the sun, and one ounce of dactyles, and an ounce and a half of fat carieks; let it be strained, and add to it an ounce and a half of syrup of violets: let a clyster be made. Let this be taken, with veal, in the aforesaid decoction.

6. To take every morning the fume of lign-aloes, rosemary and bays dried, which I use; but once in a week to add a little tobacco, without otherwise taking it in a pipe.

7. To appoint every day an hour ad affectus intentionales et sanos. Qu. de particulari.

8. To remember masticatories for the mouth.

[1] Viz. of rhubarb infused into a draught of white wine and beer, mingled together for the space of half an hour, once in six or seven days. See the Lord Bacon's Life, by Dr. Rawley, towards the end.

9. And orange-flower water to be smelt to or snuffed up.

10. In the third hour after the sun is risen, to take in air from some high and open place, with a ventilation of rosæ moschatæ, and fresh violets; and to stir the earth, with infusion of wine and mint.

11. To use ale with a little enula campana, carduus, germander, sage, angelica-seed, cresses of a middle age, to beget a robust heat.

12. Mithridate thrice a year.

13. A bit of bread dipt in vino odorato, with syrup of dry roses, and a little amber, at going to bed.

14. Never to keep the body in the same posture above half an hour at a time.

15. Four precepts. To break off custom. To shake off spirits ill disposed. To meditate on youth. To do nothing against a man's genius.

16. Syrup of quinces for the mouth of the stomach. Inquire concerning other things useful in that kind.

17. To use once during supper time wine in which gold is quenched.

18. To use anointing in the morning lightly with oil of almonds, with salt and saffron, and a gentle rubbing.

19. Ale of the second infusion of the vine of oak.

20. Methusalem water, of pearls and shells of crabs, and a little chalk.

21. Ale of raisins, dactyles, potatoes, pistachios, honey, tragacanth, mastic.

22. Wine with swines flesh or harts flesh.

23. To drink the first cup at supper hot, and half an hour before supper something hot and aromatised.

24. Chalybeates four times a year.

25. Pilulæ ex tribus, once in two months, but after the mass has been macerated in oil of almonds.

26. Heroic desires.

27. Bathing of the feet once in a month, with lye ex sale nigro, camomile, sweet marjoram, fennel, sage, and a little aqua vitæ.

28. To provide always an apt breakfast.

29. To beat the flesh before roasting of it.

30. Maceration in pickles.

31. Agitation of beer by ropes, or in wheel-barrows.

32. That diet is good which makes lean, and then renews. Consider of the ways to effect it.

MEDICINAL RECEIPTS OF THE LORD BACON.

His Lordship's usual receipt for the Gout. To which he refers, Nat. His. Cent. I. *N.* 60.

1. *The poultis.*

Take of manchet about three ounces, the crumb only, thin cut; let it be boiled in milk till it grow to a pulp. Add in the end a dram and a half of the powder of red roses; of saffron ten grains; of oil of roses an ounce; let it be spread upon a linen cloth, and applied lukewarm, and continued for three hours space.

2. *The bath or fomentation.*

Take of sage leaves half a handful; of the root of hemlock sliced six drams; of briony roots half an ounce; of the leaves of red roses two pugils; let them boiled in a pottle of water, wherein steel hath been quenched, till the liquor come to a quart. After the straining, put in half a handful of bay salt. Let it be used with scarlet cloth, or scarlet wool, dipped in the liquor hot, and so renewed seven times; all in the space of a quarter of an hour, or little more.

3. *The plaister.*

Take emplastrum diachalciteos, as much as is sufficient for the part you mean to cover. Let it be dissolved with oil of roses, in such a consistence as will stick; and spread upon a piece of holland, and applied.

His Lordship's broth and fomentation for the stone.

The broth.

Take one dram of eryngium roots, cleansed and sliced; and boil them together with a chicken. In the end, add of elder flowers, and marigold flowers together, one pugil; of angelica-seed half a dram, of raisins

of the sun stoned, fifteen; of rosemary, thyme, mace, together, a little.

In six ounces of this broth or thereabouts, let there be dissolved of white cremor tartari three grains.

Every third or fourth day, take a small toast of manchet, dipped in oil of sweet almonds new drawn, and sprinkled with a little loaf sugar. You may make the broth for two days, and take the one-half every day.

If you find the stone to stir, forbear the toast for a course or two. The intention of this broth is, not to void, but to undermine the quarry of the stones in the kidneys.

The fomentation.

Take of leaves of violets, mallows, pellitory of the wall, together, one handful; of flowers of camomile and melilot, together, one pugil; the root of marsh-mallows, one ounce; of anise and fennel seeds, together, one ounce and a half; of flax seed two drams. Make a decoction in spring water.

The second receipt, shewing the way of making a certain ointment, which his lordship called Unguentum fragrans, sive Romanum, the fragrant or Roman unguent.

Take of the fat of a deer half a pound; of oil of sweet almonds two ounces: let them be set upon a very gentle fire, and stirred with a stick of juniper till they are melted. Add of root of flower-de-luce powdered, damask roses powdered, together, one dram of myrrh dissolved in rose-water half a dram; of cloves half a scruple; of civet four grains; of musk six grains; of oil of mace expressed one drop; as much of rose-water as sufficeth to keep the unguent from being too thick. Let all these be put together in a glass, and set upon the embers for the space of an hour, and stirred with a stick of juniper.

Note, that in the confection of this ointment, there was not used above a quarter of a pound, and a tenth part of a quarter of deer's suet: and that all the ingredients, except the oil of almonds, were doubled when the ointment was half made, because the fat things seemed to be too predominant.

The third receipt. A manus Christi for the stomach.

Take of the best pearls very finely pulverised, one dram; of sal nitre one scruple; of tartar two scruples; of ginger and galingal together, one ounce and a half; of calamus, root of enula campana, nutmeg, together, one scruple and a half; of amber sixteen grains; of the best musk ten grains; with rose-water and the finest sugar, let there be made a manus Christi.

The fourth receipt. A secret for the stomach.

Take lignum aloes in gross shavings, steep them in sack, or alicant, changed twice, half an hour at a time, till the bitterness be drawn forth. Then take the shavings forth, and dry them in the shade, and beat them to an excellent powder. Of that powder, with the syrup of citron, make a small pill, to be taken before supper.

WORKS MORAL.

A

FRAGMENT

OF THE

COLOURS OF GOOD AND EVIL.

TO THE LORD MOUNTJOYE.

I SEND you the last part of the best book of Aristotle of Stagira, who, as your Lordship knoweth, goeth for the best author. But saving the civil respect which is due to a received estimation, the man being a Grecian, and of a hasty wit, having hardly a discerning patience, much less a teaching patience, hath so delivered the matter, as I am glad to do the part of a good house-hen, which without any strangeness will sit upon pheasants eggs. And yet perchance, some that shall compare my lines with Aristotle's lines, will muse by what art, or rather by what revelation, I could draw these conceits out of that place. But I, that should know best, do freely acknowledge, that I had my light from him; for where he gave me not matter to perfect, at the least he gave me occasion to invent. Wherein as I do him right, being myself a man that am as free from envying the dead in contemplation, as from envying the living in action or fortune: so yet nevertheless still I say, and I speak it more largely than before, that in perusing the writings of this person so much celebrated, whether it were the impediment of his wit, or that he did it upon glory and affection to be subtile, as one that if he had seen his own conceits clearly and perspicuously delivered, perhaps would have been out of love with them himself; or else upon policy, to keep himself close, as one that had been a challenger of all the world, and

had raised infinite contradiction: to what cause soever it is to be ascribed, I do not find him to deliver and unwrap himself well of that he seemeth to conceive; nor to be a master of his own knowledge. Neither do I for my part also, though I have brought in a new manner of handling this argument, to make it pleasant and lightsome, pretend so to have overcome the nature of the subject; but that the full understanding and use of it will be somewhat dark, and best pleasing the taste of such wits as are patient to stay the digesting and soluting unto themselves of that which is sharp and subtile. Which was the cause, joined with the love and honour which I bear your lordship, as the person I know to have many virtues, and an excellent order of them, which moved me to dedicate this writing to your lordship after the ancient manner: choosing both a friend, and one to whom I conceived the argument was agreeable.

OF THE

COLOURS OF GOOD AND EVIL.

In deliberatives, the point is, what is good, and what is evil; and of good, what is greater, and of evil what is less.

So that the persuader's labour is, to make things appear good or evil, and that in higher or lower degree: which as it may be performed by true and solid reasons, so it may be represented also by colours, popularities and circumstances; which are of such force, as they sway the ordinary judgment either of a weak man, or of a wise man, not fully and considerately attending and pondering the matter. Besides their power to alter the nature of the subject in appearance, and so to lead to error, they are of no less use to quicken and strengthen the opinions and persuasions which are true; for reasons plainly delivered, and always after one manner,

especially with fine and fastidious minds, enter but heavily and dully: whereas if they be varied, and have more life and vigour put into them by these forms and insinuations, they cause a stronger apprehension, and many times suddenly win the mind to a resolution. Lastly, to make a true and safe judgment, nothing can be of greater use and defence to the mind, than the discovering and reprehension of these colours, shewing in what cases they hold, and in what they deceive: which, as it cannot be done but out of a very universal knowledge of the nature of things, so being performed, it so cleareth man's judgment and election, as it is the less apt to slide into any error.

A Table of the colours or appearances of Good and Evil, and their degrees, as places of persuasion and dissuasion, and their several fallacies, and the elenches of them.

I.

Cui cæterœ partes vel sectæ secundas unanimiter deferunt, cum singulæ principatum sibi vindicent, melior reliquis videtur. Nam primas quœque ex zelo videtur sumere, secundas autem ex vero et merito tribuere.

So Cicero went about to prove the sect of Academics, which suspended all asseveration, for to be the best. For, saith he, ask a Stoic which philosophy is true, he will prefer his own. Then ask him, which approacheth next to the truth, he will confess the Academics. So deal with the Epicure, that will scarce endure the Stoic to be in sight of him; so soon as he hath placed himself, he will place the Academics next him. So if a prince took divers competitors to a place, and examined them severally, whom next themselves they would rarest commend, it were like the ablest man should have the most second voices.

The fallax of this colour happeneth oft in respect of envy, for men are accustomed, after themselves and their own faction, to incline unto them which are softest, and are least in their way, in despite and derogation of

them that hold them hardest to it. So that this colour of meliority and pre-eminence is a sign of enervation and weakness.

II.

Cujus excellentia vel exuperantia melior, id toto genere melius.

Appertaining to this are the forms: "Let us not wander in generalities: Let us compare particular with particular," etc. This appearance, though it seem of strength, and rather logical than rhetorical, yet is very oft a fallax.

Sometime because some things are in kind very casual, which if they escape prove excellent; so that the kind is inferior, because it is so subject to peril, but that which is excellent being proved is superior: as the blossom of March, and the blossom of May, whereof the French verse goeth:

> Burgeon de Mars, enfans de Paris,
> Si un eschape, il en vaut dix.

So that the blossom of May is generally better than the blossom of March; and yet the best blossom of March is better than the best blossom of May. Sometimes because the nature of some kinds is to be more equal, and more indifferent, and not to have very distant degrees; as hath been noted, in the warmer climates the people are generally more wise, but in the northern climates the wits of chief are greater. So in many armies, if the matter should be tried by duel between two champions, the victory should go on the one side; and yet if it be tried by the gross, it would go on the other side: for excellencies go as it were by chance, but kinds go by a more certain nature; as by discipline in war.

Lastly; many kinds have much refuse, which countervail that which they have excellent: and therefore generally metal is more precious than stone; and yet a diamond is more precious than gold.

III.

Quod ad veritatem refertur, majus est, quam quod ad opinionem. Modus autem et probatio ejus, quod ad opinionem pertinet, hæc est: quod quis, si clam putaret fore, facturus non esset.

So the Epicures say of the Stoics felicity placed in

virtue, that it is like the felicity of a player, who if he were left of his auditory and their applause, he would straight be out of heart and countenance; and therefore they call virtue bonum theatrale: but of riches the poet saith,

Populus me sibilat; at mihi plaudo.

And of pleasure,

Grata sub imo
Gaudia corde premens, vultu simulante pudorem.

The fallax of this colour is somewhat subtile, though the answer to the example be ready, for virtue is not chosen propter auram popularem; but contrariwise, maxime omnium teipsum reverere: so as a virtuous man will be virtuous in solitudine, and not only in theatro, though percase it will be more strong by glory and fame, as an heat which is doubled by reflexion. But that denieth the supposition, it doth not reprehend the fallax; whereof the reprehension is: Allow that virtue, such as is joined with labour and conflict, would not be chosen but for fame and opinion: yet it followeth not that the chief motive of the election should not be real and for itself: for fame may be only causa impulsiva, and not causa constituens or efficiens. As if there were two horses, and the one would do better without the spur than the other: but again, the other with the spur would far exceed the doing of the former, giving him the spur also: yet the latter will be judged to be the better horse. And the form, as to say, "Tush, the life of this horse is but in the spur," will not serve as to a wise judgement: for since the ordinary instrument of horsemanship is the spur, and that it is no matter of impediment or burden, the horse is not to be accounted the less of, which will not do well without the spur; but rather the other is to be reckoned a delicacy than a virtue. So glory and honour are the spurs to virtue: and although virtue would languish without them, yet since they be always at hand to attend virtue, virtue is not to be said the less chosen for itself, because it needeth the spur of fame and reputation: and therefore that position, "nota ejus, quod propter opinionem et non propter veri-

tatem eligitur, hæc est; quod quis, si clam putaret fore, facturus non esset," is reprehended.

IV.

Quod rem integram servat, bonum; quod sine receptu est, malum: nam se recipere non posse, impotentiæ genus est; potentia autem bonum.

Hereof Æsop framed the fable of the two frogs, that consulted together in the time of drought, when many plashes, that they had repaired to, were dry, what was to be done; and the one propounded to go down into a deep well, because it was like the water would not fail there; but the other answered, "Yea, but if it do fail, how shall we get up again?" And the reason is, that human actions are so uncertain and subject to perils, as that seemeth the best course which hath most passages out of it. Appertaining to this persuasion, the forms are: You shall engage yourself; on the other side, "Non tantum, quantum voles, sumes ex fortuna, etc." You shall keep the matter in your own hand.

The reprehension of it is, that proceeding and resolving in all actions is necessary. For as he saith well, Not to resolve, is to resolve; and many times it breeds as many necessities, and engageth as far in some other sort, as to resolve. So it is but the covetous man's disease, translated in power; for the covetous man will enjoy nothing, because he will have his full store and possibility to enjoy the more: so by this reason a man should execute nothing, because he should be still indifferent, and at liberty to execute any thing. Besides, necessity and this same jacta est alea, hath many times an advantage, because it awaketh the powers of the mind, and strengtheneth endeavour; "Cæteris pares, necessitate certe superiores estis."

V.

Quod ex pluribus constat et divisibilibus est majus, quam quod ex paucioribus, et magis unum; nam omnia per partes considerata majora videntur: quare et pluralitas partium magnitudinem præ se fert: fortius autem operatur pluralitas partium si ordo absit; nam inducit similitudinem infiniti, et impedit comprehensionem.

This colour seemeth palpable; for it is not plurality

of parts without majority of parts, that maketh the total greater; yet nevertheless it often carries the mind away, yea, it deceiveth the sense; as it seemeth to the eye a shorter distance of way, if it be all dead and continued, than if it have trees or buildings, or any other marks whereby the eye may divide it. So when a great monied man hath divided his chests, and coins, and bags, he seemeth to himself richer than he was; and therefore a way to amplify any thing is, to break it, and to make anatomy of it in several parts, and to examine it according to several circumstances. And this maketh the greater shew if it be done without order, for confusion maketh things muster more; and besides, what is set down by order and division, doth demonstrate that nothing is left out or omitted, but all is there; whereas if it be without order, both the mind comprehendeth less than that which is set down; and besides, it leaveth a suspicion, as if more might be said than is expressed.

This colour deceiveth, if the mind of him that is to be persuaded, do of itself over-conceive, or prejudge of the greatness of any thing; for then the breaking of it will make it seem less, because he maketh it to appear more according to the truth: and therefore if a man be in sickness or pain, the time will seem longer without a clock or hour-glass, than with it; for the mind doth value every moment, and then the hour doth rather sum up the moments, than divide the day. So in a dead plain the way seemeth the longer, because the eye hath preconceived it shorter than the truth, and the frustrating of that maketh it seem longer than the truth. Therefore if any man have an over-great opinion of any thing, then if another think by breaking it into several considerations he shall make it seem greater to him, he will be deceived; and therefore in such cases it is not safe to divide, but to extol the entire still in general. Another case wherein this colour deceiveth, is when the matter broken or divided is not comprehended by the sense or made at once, in respect of the distracting or scattering of it; and being intire and not divided, is comprehended: as an hundred pounds in heaps of

five pounds will shew more than in one gross heap, so as the heaps be all upon one table to be seen at once, otherwise not: as flowers growing scattered in divers beds will shew more than if they did grow in one bed, so as all those beds be within a plot, that they be object to view at once, otherwise not: and therefore men, whose living lieth together in one shire, are commonly counted greater landed than those whose livings are dispersed, though it be more, because of the notice and comprehension. A third case wherein this colour deceiveth, and it is not so properly a case of reprehension, as it is a counter colour, being in effect as large as the colour itself; and that is, "omnis compositio indigentiæ cujusdam in singulis videtur esse particeps," because if one thing would serve the turn, it were ever best, but the defect and imperfections of things hath brought in that help to piece them up; as it is said, "Martha, Martha, attendis ad plurima, unum sufficit." So likewise hereupon Æsop framed the fable of the fox and the cat; whereas the fox bragged what a number of shifts and devices he had to get from the hounds, and the cat said he had but one, which was to climb a tree, which in proof was better worth than all the rest; whereof the proverb grew, "Multa novit vulpes, sed felis unum magnum." And in the moral of this fable it comes likewise to pass, that a good sure friend is a better help at a pinch, than all the stratagems and policies of a man's own wit. So it falleth out to be a common error in negociating, whereas men have many reasons to induce or persuade, they strive commonly to utter and use them all at once, which weakeneth them. For it argueth, as was said, a neediness in every of the reasons by itself, as if one did not trust to any of them, but fled from one to another, helping himself only with that: "Et quæ non prosunt singula, multa juvant." Indeed in a set speech in an assembly, it is expected a man should use all his reasons in the case he handleth, but in private persuasions it is always a great error. A fourth case wherein this colour may be reprehended, is in respect of that same "vis unita fortior," according to the tale of the French king, that when the emperor's

ambassador had recited his master's stile at large, which consisteth of many countries and dominions; the French king willed his chancellor, or other minister, to repeat over France as many times as the other had recited the several dominions; intending it was equivalent with them all, and more compacted and united. There is also appertaining to this colour another point, why breaking of a thing doth help it, not by way of adding a shew of magnitude unto it, but a note of excellency and rarity; whereof the forms are, Where shall you find such a concurrence? Great but not complete; for it seems a less work of nature or fortune, to make any thing in his kind greater than ordinary, than to make a strange composition. Yet if it be narrowly considered, this colour will be reprehended or encountered, by imputing to all excellencies in compositions a kind of poverty, or at least a casualty or jeopardy; for from that which is excellent in greatness, somewhat may be taken, or there may be a decay, and yet sufficient left; but from that which hath his price in composition if you take away any thing, or any part do fail, all is disgrace.

VI.

Cujus privatio bona, malum; cujus privatio mala, bonum.

The forms to make it conceived, that that was evil which is changed for the better, are, He that is in hell thinks there is no other heaven. "Satis quercus," Acorns were good till bread was found, etc. And of the other side, the forms to make it conceived, that that was good which was changed for the worse, are, "Bona magis carendo quam fruendo sentimus: Bona a tergo formosissima:" Good things never appear in their full beauty, till they turn their back and be going away, etc.

The reprehension of this colour is, that the good or evil which is removed, may be esteemed good or evil comparatively, and not positively or simply. So that if the privation be good, it follows not the former condition was evil, but less good: for the flower or blossom is a positive good, although the remove of it to give

place to the fruit, be a comparative good. So in the tale of Æsop, when the old fainting man in the heat of the day cast down his burden, and called for Death; and when Death came to know his will with him, said, it was for nothing but to help him up with his burden again: it doth not follow, that because death, which was the privation of the burden, was ill, therefore the burden was good. And in this part, the ordinary form of malum necessarium aptly reprehendeth this colour; for "privatio mali necessarii est mala," and yet that doth not convert the nature of the necessary evil, but it is evil.

Again, it cometh sometimes to pass, that there is an equality in the change of privation, and as it were a dilemma boni, or a dilemma mali: so that the corruption of the one good, is a generation of the other. Sorti pater æquus utrique est: and contrary, the remedy of the one evil is the occasion and commencement of another, as in Scylla and Charybdis.

VII.

Quod bono vicinum, bonum; quod a bono remotum, malum.

Such is the nature of things, that things contrary, and distant in nature and quality, are also severed and disjoined in place: and things like and consenting in quality, are placed, and as it were quartered together: for, partly in regard of the nature to spread, multiply, and infect in similitude; and partly in regard of the nature to break, expel, and alter that which is disagreeable and contrary, most things do either associate, and draw near to themselves the like, or at least assimilate to themselves that which approacheth near them, and do also drive away, chase and exterminate their contraries. And that is the reason commonly yielded, why the middle region of the air should be coldest, because the sun and stars are either hot by direct beams, or by reflection. The direct beams heat the upper region, the reflected beams from the earth and seas heat the lower region. That which is in the midst, being farthest distant in place from these two regions of heat, are most distant in nature, that is, coldest; which is that

they term cold or hot per antiperistasin, that is, environing by contraries: which was pleasantly taken hold of by him that said, that an honest man, in these days, must needs be more honest than in ages heretofore, propter antiperistasin, because the shutting of him in the midst of contraries, must needs make the honesty stronger and more compact in itself.

The reprehension of this colour is: first, many things of amplitude in their kind do as it were ingross to themselves all, and leave that which is next them most destitute: as the shoots or underwood, that grow near a great and spread tree, is the most pined and shrubby wood of the field, because the great tree doth deprive and deceive them of sap and nourishment; so he saith well, "divitis servi maxime servi:" and the comparison was pleasant of him, that compared courtiers attendant in the courts of princes without great place or office, to fasting-days, which were next the holy-days, but otherwise were the leanest days in all the week.

Another reprehension is, that things of greatness and predominancy, though they do not extenuate the things adjoining in substance, yet they drown them and obscure them in shew and appearance; and therefore the astronomers say, That whereas in all other planets conjunction is the perfectest amity; the sun contrariwise is good by aspect, but evil by conjunction.

A third reprehension is, because evil approacheth to good sometimes for concealment, sometimes for protection; and good to evil for conversion and reformation. So hypocrisy draweth near to religion for covert, and hiding itself; "sæpe latet vitium proximitate boni:" and sanctuary-men, which were commonly inordinate men and malefactors, were wont to be nearest to priests and prelates, and holy men; for the majesty of good things is such, as the confines of them are reverend. On the other side, our Saviour, charged with nearness of publicans and rioters, said, "the physician approacheth the sick, rather than the whole."

VIII.

Quod quis culpa sua contraxit, majus malum; quod ab externis imponitur, minus malum.

The reason is, because the sting and remorse of the mind accusing itself doubleth all adversity: contrariwise, the considering and recording inwardly, that a man is clear and free from fault and just imputation, doth attemper outward calamities. For if the evil be in the sense, and in the conscience both, there is a gemination of it; but if evil be in the one, and comfort in the other, it is a kind of compensation: so the poets in tragedies do make the most passionate lamentation, and those that fore-run final despair, to be accusing, questioning, and torturing of a man's life.

Seque unum clamat causamque caputque malorum.

And contrariwise, the extremities of worthy persons have been annihilated in the consideration of their own good deserving. Besides, when the evil cometh from without, there is left a kind of evaporation of grief, if it come by human injury, either by indignation, and meditating of revenge from ourselves, or by expecting or fore-conceiving that Nemesis and retribution will take hold of the authors of our hurt: or if it be by fortune or accident, yet there is left a kind of expostulation against the divine powers;

Atque deos atque astra vocat crudelia mater.

But where the evil is derived from a man's own fault, there all strikes deadly inwards, and suffocateth.

The reprehension of this colour is, first in respect of hope, for reformation of our faults is in nostra potestate; but amendment of our fortune simply is not. Therefore, Demosthenes, in many of his orations, saith thus to the people of Athens: "That which having regard to the time past is the worst point and circumstance of all the rest; that as to the time to come is the best: what is that? Even this, that by your sloth, irresolution, and misgovernment, your affairs are grown to this declination and decay. For had you used and ordered your means and forces to the best, and done your parts every way to the full, and, notwithstanding, your mat-

ters should have gone backward in this manner as they do, there had been no hope left of recovery or reparation; but since it hath been only by our own errors," etc. So Epictetus in his degrees saith, The worst state of man is to accuse external things, better than that to accuse a man's self, and best of all to accuse neither.

Another reprehension of this colour is, in respect of the well bearing of evils wherewith a man can charge nobody but himself, which maketh them the less.

Leve fit quod bene fertur onus.

And therefore many natures that are either extremely proud, and will take no fault to themselves, or else very true and cleaving to themselves, when they see the blame of any thing that falls out ill must light upon themselves, have no other shift but to bear it out well, and to make the least of it; for as we see when sometimes a fault is committed, and before it be known who is to blame, much ado is made of it; but after, if it appear to be done by a son, or by a wife, or by a near friend, then it is light made of: so much more when a man must take it upon himself. And therefore it is commonly seen, that women that marry husbands of their own choosing against their friends consents, if they be never so ill used, yet you seldom see them complain, but set a good face on it.

IX.

Quod opera et virtute nostra partum est, majus bonum; quod ab alieno beneficio vel ab indulgentia fortunæ delatum, est minus bonum.

The reasons are, first, the future hope, because in the favours of others, or the good winds of fortune, we have no state or certainty; in our endeavours or abilities we have. So as when they have purchased us one good fortune, we have them as ready, and better edged, and inured to procure another.

The forms be: You have won this by play, You have not only the water, but you have the receipt, you can make it again if it be lost, etc.

Next, because these properties which we enjoy by

the benefit of others, carry with them an obligation, which seemeth a kind of burden; whereas the others, which derive from ourselves, are like the freest patents, "absque aliquo inde reddendo;" and if they proceed from fortune or providence, yet they seem to touch us secretly with the reverence of the divine powers, whose favours we taste, and therefore work a kind of religious fear and restraint: whereas in the other kind, that comes to pass which the prophet speaketh, "lætantur et exultant, immolant plagis suis, et sacrificant reti suo."

Thirdly, because that which cometh unto us without our own virtue, yielded not that commendation and reputation; for actions of great felicity may draw wonder, but praise less; as Cicero said to Cæsar, "Quæ miremur, habemus; quæ laudemus, expectamus."

Fourthly, because the purchases of our own industry are joined commonly with labour and strife, which gives an edge and appetite, and makes the fruition of our desires more pleasant. Suavis cibus a venatu.

On the other side, there be four counter colours to this colour, rather than reprehensions, because they be as large as the colour itself. First, because felicity seemeth to be a character of the favour and love of the divine powers, and accordingly worketh both confidence in ourselves, and respect and authority from others. And this felicity extendeth to many casual things, whereunto the care or virtue of man cannot extend, and therefore seemeth to be a larger good; as when Cæsar said to the sailor, "Cæsarem portas et fortunam ejus;" if he had said, "et virtutem ejus," it had been small comfort against a tempest, otherwise than if it might seem upon merit to induce fortune.

Next, whatsoever is done by virtue and industry, seems to be done by a kind of habit and art, and therefore open to be imitated and followed; whereas felicity is inimitable: so we generally see, that things of nature seem more excellent than things of art, because they be inimitable: for "quod imitabile est, potentia quadam vulgatum est."

Thirdly, felicity commendeth those things which

come without our own labour; for they seem gifts, and the other seem pennyworths: whereupon Plutarch saith elegantly of the acts of Timoleon, who was so fortunate, compared with the acts of Agesilaus and Epaminondas; that they were like Homer's verses, they ran so easily and so well. And therefore it is the word we give unto poesy, terming it a happy vein, because facility seemeth ever to come from happiness.

Fourthly, this same præter spem, vel præter expectatum, doth increase the price and pleasure of many things: and this cannot be incident to those things that proceed from our own care and compass.

X.

Gradus privationis major videtur, quam gradus diminutionis; et rursus gradus inceptionis major videtur, quam gradus incrementi.

It is a position in the mathematics, that there is no proportion between somewhat and nothing, therefore the degree of nullity and quiddity or act, seemeth larger than the degrees of increase and decrease; as to a monoculus it is more to lose one eye than to a man that hath two eyes. So if one have lost divers children, it is more grief to him to lose the last, than all the rest; because he is spes gregis. And therefore Sibylla, when she brought her three books, and had burned two, did double the whole price of both the other, because the burning of that had been gradus privationis, and not diminutionis.

This colour is reprehended first in those things, the use and service whereof resteth in sufficiency, competency, or determinate quantity: as if a man be to pay one hundred pounds upon a penalty, it is more to him to want twelve pence, than after that twelve pence supposed to be wanting to want ten shillings more; so the decay of a man's estate seems to be most touched in the degree, when he first grows behind, more than afterwards, when he proves nothing worth. And hereof the common forms are, "Sera in fundo parsimonia," and, As good never a whit, as never the better, etc. It is reprehended also in respect of that notion, "Corrup-

tio unius, generatio alterius:" so that gradus privationis is many times less matter, because it gives the cause and motive to some new course. As when Demosthenes reprehended the people for hearkening to the conditions offered by king Philip, being not honourable nor equal, he saith they were but aliments of their sloth and weakness, which if they were taken away, necessity would teach them stronger resolutions. So doctor Hector was wont to say to the dames of London, when they complained they were they could not tell how, but yet they could not endure to take any medicine; he would tell them, their way was only to be sick, for then they would be glad to take any medicine.

Thirdly, this colour may be reprehended, in respect that the degree of decrease is more sensitive than the degree of privation; for in the mind of man gradus diminutionis may work a wavering between hope and fear, and so keep the mind in suspense, from settling and accommodating in patience and resolution. Hereof the common forms are, Better eye out than always ache; Make or mar, etc.

For the second branch of this colour, it depends upon the same general reason: hence grew the common place of extolling the beginning of every thing: "dimidium facti qui bene cœpit habet." This made the astrologers so idle as to judge of a man's nature and destiny, by the constellation of the moment of his nativity or conception. This colour is reprehended, because many inceptions are but, as Epicurus termeth them, tentamenta, that is, imperfect offers and essays, which vanish and come to no substance without an iteration; so as in such cases the second degree seems the worthiest, as the body-horse in the cart, that draweth more than the fore-horse. Hereof the common forms are, The second blow makes the fray, the second word makes the bargain; "Alter malo principium dedit, alter modum abstulit," etc. Another reprehension of this colour is in respect of defatigation, which makes perseverance of greater dignity than inception: for chance or instinct of nature may cause inception; but settled affection, or judgment, maketh the continuance.

Thirdly, This colour is reprehended in such things, which have a natural course and inclination contrary to an inception. So that the inception is continually evacuated and gets no start; as in the common form, "Non progredi est regredi, Qui non proficit deficit:" running against the hill; rowing against the stream, etc. For if it be with the stream or with the hill, then the degree of inception is more than all the rest.

Fourthly, This colour is to be understood of "gradus inceptionis a potentia ad actum, comparatus cum gradu ab actu ad incrementum." For otherwise "major videtur gradus ab impotentia ad potentiam, quam a potentia ad actum."

ESSAYS OR COUNSELS

CIVIL AND MORAL.

TO MR. ANTHONY BACON, HIS DEAR BROTHER.

LOVING AND BELOVED BROTHER,

I do now like some that have an orchard ill neighboured, that gather their fruit before it is ripe, to prevent stealing. These fragments of my conceits were going to print; to labour the stay of them had been troublesome, and subject to interpretation; to let them pass had been to adventure the wrong they might receive by untrue copies, or by some garnishment which it might please any that should set them forth to bestow upon them. Therefore I held it best discretion to publish them myself, as they passed long ago from my pen, without any further disgrace than the weakness of the author. And as I did ever hold, there might be as great a vanity in retiring and withdrawing mens conceits, except they be of some nature, from the world, as in obtruding them: so in these particulars I have played myself the inquisitor, and find nothing to my understanding in them contrary or infectious to the state of religion or manners, but rather, as I suppose, medicinable. Only I disliked now to put them out, because they will be like the late new half-pence, which though the silver were good, yet the pieces were small. But since they would not stay with their master, but would needs travel abroad, I have preferred them to you that are next myself; dedicating them, such as they are, to our love, in the depth whereof, I assure you, I sometimes wish your infirmities translated upon myself, that her majesty might have the service of so active and able a mind; and I might be with excuse confined to these contemplations and studies, for which I am fittest: so commend I you to the preservation of the divine Majesty.

Your intire loving Brother,

From my chamber at Gray's-Inn,
this 30th of January, 1597.

FRAN. BACON.

TO MY LOVING BROTHER, SIR JOHN CONSTABLE, KNIGHT.

My last Essays I dedicated to my dear brother, Mr. Anthony Bacon, who is with God. Looking amongst my papers this vacation, I found others of the same nature: which if I myself shall not suffer to be lost, it seemeth the world will not, by the often printing of the former. Missing my brother, I found you next; in respect of bond both of near alliance, and of strait friendship and society, and particularly of communication in studies: wherein I must acknowledge myself beholden to you. For as my business found rest in my contemplations, so my contemplations ever found rest in your loving conference and judgment. So wishing you all good, I remain

1612. Your loving brother and friend,

FRAN. BACON.

TO THE RIGHT HONOURABLE MY VERY GOOD LORD THE DUKE OF BUCKINGHAM, HIS GRACE, LORD HIGH ADMIRAL OF ENGLAND.

EXCELLENT LORD,

Solomon says, "A good name is as a precious ointment;" and I assure myself such will your grace's name be with posterity. For your fortune and merit both have been eminent: and you have planted things that are like to last. I do now publish my Essays; which of all my other works have been most current: for that, as it seems, they come home to mens business and bosoms. I have enlarged them both in number and weight; so that they are indeed a new work. I thought it therefore agreeable to my affection and obligation to your grace, to prefix your name before them both in English and in Latin: For I do conceive, that the Latin volume of them, being in the universal language, may last as long as books last. My Instauration I dedicated to the king: my History of Henry the Seventh, which I have now also translated into Latin, and my portions of Natural History, to the prince: and these I dedicate to your grace; being of the best fruits, that by the good increase which God gives to my pen and labours I could yield. God lead your grace by the hand.

1625. Your grace's most obliged and faithful servant,

FRAN. ST. ALBAN.

ESSAYS CIVIL AND MORAL.

I. OF TRUTH.

WHAT is truth? said jesting Pilate; and would not stay for an answer. Certainly there be that delight in giddiness; and count it a bondage to fix a belief; affecting free-will in thinking, as well as in acting. And though the sects of philosophers of that kind be gone, yet there remain certain discoursing wits, which are of the same veins, though there be not so much blood in them as was in those of the ancients. But it is not only the difficulty and labour which men take in finding out of truth; nor again, that when it is found, it imposeth upon mens thoughts; that doth bring lyes in favour: but a natural though corrupt love of the lye itself. One of the later school of the Grecians examineth the matter, and is at a stand to think what should be in it, that men should love lyes; where neither they make for pleasure, as with poets; nor for advantage, as with the merchant; but for the lye's sake. But I cannot tell: this same truth is a naked and open day-light, that doth not shew the masks, and mummeries, and triumphs of the world, half so stately and daintily as candle-lights. Truth may perhaps come to the price of a pearl, that sheweth best by day; but it will not rise to the price of a diamond or carbuncle, that sheweth best in varied lights. A mixture of a lye doth ever add pleasure. Doth any man doubt, that if there were taken out of mens minds, vain opinions, flattering hopes, false valuations, imaginations as one would, and the like; but it would leave the minds of a number of men, poor shrunken things; full of melancholy and indisposition, and unpleasing to themselves? One of the fathers, in great severity, called poesy, vinum dæmonum; because it filleth the imagi-

nation, and yet it is but with the shadow of a lye. (But it is not the lye that passeth through the mind, but the lye that sinketh in, and settleth in it, that doth the hurt, such as we spake of before.) But howsoever these things are thus in mens depraved judgments and affections, yet truth, which only doth judge itself, teacheth, that the inquiry of truth, which is the love-making, or wooing of it; the knowledge of truth, which is the presence of it; and the belief of truth, which is the enjoying of it; is the sovereign good of human nature. The first creature of God, in the works of the days, was the light of the sense; the last was the light of reason; and his sabbath work ever since is the illumination of his Spirit. First he breathed light upon the face of the matter, or chaos; then he breathed light into the face of man; and still he breatheth and inspireth light into the face of his chosen. The poet that beautified the sect, that was otherwise inferior to the rest, saith yet excellently well: "It is a pleasure to stand upon the shore, and to see ships tost upon the sea: a pleasure to stand in the window of a castle, and to see a battle, and the adventures thereof below: but no pleasure is comparable to the standing upon the vantage ground of truth, a hill not to be commanded, and where the air is always clear and serene: and to see the errors, and wanderings, and mists, and tempests, in the vale below:" so always, that this prospect be with pity, and not with swelling or pride. Certainly, it is heaven upon earth, to have a man's mind move in charity, rest in providence, and turn upon the poles of truth.

To pass from theological and philosophical truth, to the truth of civil business; it will be acknowledged, even by those that practise it not, that clear and round dealing is the honour of man's nature; and that mixture of falsehood is like allay in coin of gold and silver; which may make the metal work the better, but it embaseth it. For these winding and crooked courses are the goings of the serpent; which goeth basely upon the belly, and not upon the feet. There is no vice that doth so cover a man with shame, as to be found false and perfidious. And therefore Montagne saith prettily, when he inquired

the reason, why the word of the lye should be such a disgrace, and such an odious charge? Saith he, "If it be well weighed, to say that a man lyeth, is as much as to say, that he is brave towards God, and a coward towards men. For a lye faces God, and shrinks from man." Surely the wickedness of falsehood, and breach of faith, cannot possibly be so highly expressed, as in that it shall be the the last peal to call the judgments of God upon the generations of men: it being foretold, that when Christ cometh "he shall not find faith upon the earth."

II. OF DEATH.

Men fear death, as children fear to go in the dark: and as that natural fear in children is increased with tales, so is the other. Certainly, the contemplation of death, as the wages of sin, and passage to another world, is holy and religious; but the fear of it, as a tribute due unto nature, is weak. Yet in religious meditations, there is sometimes mixture of vanity and of superstition. You shall read in some of the friars books of mortification, that a man should think with himself, what the pain is, if he have but his finger's end pressed or tortured; and thereby imagine what the pains of death are, when the whole body is corrupted and dissolved; when many times death passeth with less pain than the torture of a limb: for the most vital parts are not the quickest of sense. And by him that spake only as a philosopher, and natural man, it was well said, "Pompa mortis magis terret, quam mors ipsa." Groans, and convulsions, and a discoloured face, and friends weeping, and blacks, and obsequies, and the like, shew death terrible. It is worthy the observing, that there is no passion in the mind of man so weak, but it mates and masters the fear of death: and therefore death is no such terrible enemy, when a man hath so many attendants about him, that can win the combat of him. Revenge triumphs over death; love slights it; honour aspireth to it; grief flieth to it; fear pre-occupateth it: nay, we read, after Otho the emperor had slain himself, pity, which is the tenderest of affections, provoked many to die, out of mere compassion to their sove-

reign, and as the truest sort of followers. Nay, Seneca adds, niceness and satiety; "cogita quamdiu eadem feceris; mori velle, non tantum fortis, aut miser, sed etiam fastidiosus potest." A man would die, though he were neither valiant nor miserable, only upon a weariness to do the same thing so oft over and over. It is no less worthy to observe, how little alteration in good spirits the approaches of death make; for they appear to be the same men till the last instant. Augustus Cæsar died in a compliment; "Livia, conjugii nostri memor vive, et vale." Tiberius in dissimulation; as Tacitus saith of him; "Jam Tiberium vires et corpus, non dissimulatio, deserebant." Vespasian in a jest; sitting upon the stool; "Ut puto, Deus fio." Galba with a sentence; "Feri, si ex re sit populi Romani;" holding forth his neck. Septimius Severus in dispatch; "Adeste, si quid mihi restat agendum:" and the like. Certainly the Stoics bestowed too much cost upon death, and by their great preparations made it appear more fearful. Better saith he, "qui finem vitæ extremum inter munera ponit naturæ." It is as natural to die, as to be born; and to a little infant, perhaps, the one is as painful as the other. He that dies in an earnest pursuit, is like one that is wounded in hot blood; who, for the time, scarce feels the hurt; and therefore a mind fixt and bent upon somewhat that is good, doth avert the dolours of death: but above all, believe it, the sweetest canticle is, "Nunc dimittis;" when a man hath obtained worthy ends and expectations. Death hath this also; that it openeth the gate to good fame, and extinguisheth envy. —"Extinctus amabitur idem."

III. OF UNITY IN RELIGION.

Religion being the chief band of human society, it is a happy thing, when itself is well contained within the true band of unity. The quarrels and divisions about religion were evils unknown to the heathen. The reason was, because the religion of the heathen consisted rather in rites and ceremonies, than in any constant belief. For you may imagine what kind of faith theirs was, when the chief doctors and fathers of their

church were the poets. But the true God hath this attribute, that he is a jealous God; and therefore his worship and religion will endure no mixture nor partner. We shall therefore speak a few words concerning the unity of the Church: what are the fruits thereof; what the bounds; and what the means.

The fruits of unity, next unto the well-pleasing of God, which is all in all, are two; the one towards those that are without the Church; the other towards those that are within. For the former; it is certain, that heresies and schisms are of all others the greatest scandals; yea more than corruption of manners. For as in the natural body, a wound, or solution of continuity, is worse than a corrupt humour; so in the spiritual. So that nothing doth so much keep men out of the Church, and drive men out of the Church, as breach of unity: and therefore, whensoever it cometh to that pass, that one saith, "ecce in deserto;" another saith, "ecce in penetralibus;" that is, when some men seek Christ in the conventicles of heretics, and others in an outward face of a church, that voice had need continually to sound in mens ears, "nolite exire," go not out. The doctor of the Gentiles, the propriety of whose vocation drew him to have a special care of those without, saith; "If an heathen come in, and hear you speak with several tongues, will he not say that you are mad? And certainly it is little better, when atheists, and profane persons, do hear of so many discordant and contrary opinions in religion; it doth avert them from the Church, and maketh them "to sit down in the chair of the scorners." It is but a light thing to be vouched in so serious a manner, but yet it expresseth well the deformity: There is a master of scoffing; that in his catalogue of books of a feigned library sets down this title of a book; "The Morris-dance of Heretiques." For indeed every sect of them hath a diverse posture or cringe by themselves, which cannot but move derision in worldlings and depraved politics, who are apt to contemn holy things.

As for the fruit towards those that are within, it is peace; which containeth infinite blessings: it esta-

blisheth faith; it kindleth charity; the outward peace of the Church distilleth into peace of conscience; and it turneth the labours of writing and reading of controversies into treatises of mortification and devotion.

Concerning the bonds of unity; the true placing of them importeth exceedingly. There appear to be two extremes. For to certain zealots all speech of pacification is odious. "Is it peace, Jehu? What hast thou to do with peace? turn thee behind me." Peace is not the matter, but following and party. Contrariwise, certain Laodiceans, and lukewarm persons, think they may accommodate points of religion by middle-ways, and taking part of both, and witty reconcilements; as if they would make an arbitrement between God and man. Both these extremes are to be avoided; which will be done, if the league of Christians, penned by our Saviour himself, were, in the two cross clauses thereof, soundly and plainly expounded: "he that is not with us is against us:" and again, "he that is not against us is with us:" that is, if the points fundamental, and of substance, in religion, were truly discerned and distinguished from points not merely of faith, but of opinion, order, or good intention. This is a thing may seem to many a matter trivial, and done already; but if it were done less partially, it would be embraced more generally.

Of this I may give only this advice, according to my small model. Men ought to take heed of rending God's Church by two kinds of controversies. The one is, when the matter of the point controverted is too small and light, not worth the heat and strife about it, kindled only by contradiction. For, as it is noted by one of the Fathers, Christ's coat indeed had no seam; but the Church's vesture was of divers colours: whereupon he saith, "in veste varietas sit, scissura non sit;" they be two things, unity, and uniformity. The other is, when the matter of the point controverted is great; but it is driven to an over-great subtilty and obscurity; so that it becometh a thing rather ingenious than substantial. A man that is of judgment and understand-

ing, shall sometimes hear ignorant men differ, and know well within himself, that those which so differ mean one thing, and yet they themselves would never agree. And if it come so to pass in that distance of judgment which is between man and man, shall we not think that God above, that knows the heart, doth not discern that frail men, in some of their contradictions, intend the same thing, and accepteth of both? The nature of such controversies is excellently expressed by St. Paul, in the warning and precept that he giveth concerning the same; "devita profanas vocum novitates, et oppositiones falsi nominis scientiæ." Men create oppositions which are not; and put them into new terms so fixed, as, whereas the meaning ought to govern the term, the term in effect governeth the meaning. There be also two false peaces or unities; the one, when the peace is grounded but upon an implicit ignorance; for all colours will agree in the dark: the other, when it is pieced up upon a direct admission of contraries in fundamental points. For truth and falsehood, in such things, are like the iron and clay in the toes of Nebuchadnezzar's image; they may cleave, but they will not incorporate.

Concerning the means of procuring unity; men must beware, that in the procuring or muniting of religious unity, they do not dissolve and deface the laws of charity, and of human society. There be two swords amongst Christians, the spiritual and temporal; and both have their due office and place in the maintenance of religion. But we may not take up the third sword, which is Mahomet's sword, or like unto it; that is, to propagate religion by wars, or by sanguinary persecutions to force consciences; except it be in cases of overt scandal, blasphemy, or intermixture of practice against the state; much less to nourish seditions; to authorise conspiracies and rebellions; to put the sword into the people's hands, and the like, tending to the subversion of all government, which is the ordinance of God. For this is but to dash the first table against the second; and so to consider men as Christians, as we forget that they

are men. Lucretius the poet, when he beheld the act of Agamemnon, that could endure the sacrificing of his own daughter, exclaimed;

Tantum religio potuit suadere malorum.

What would he have said, if he had known of the massacre in France, or the powder-treason of England? He would have been seven times more epicure and atheist than he was: for as the temporal sword is to be drawn with great circumspection, in cases of religion; so it is a thing monstrous to put it into the hands of the common people. Let that be left unto the anabaptists, and other furies. It was great blasphemy, when the devil said, "I will ascend, and be like the Highest;" but it is greater blasphemy to personate God, and bring him in saying, "I will descend, and be like the prince of darkness." And what is it better to make the cause of religion to descend to the cruel and execrable actions of murthering princes, butchery of people, and subversion of states and governments? Surely, this is to bring down the Holy Ghost, instead of the likeness of a dove, in the shape of a vulture or raven: and to set, out of the bark of a Christian Church, a flag of a bark of pirates and assassins. Therefore it is most necessary, that the Church by doctrine and decree; princes by their sword; and all learnings, both Christian and moral, as by their mercury rod; do damn and send to hell for ever those facts and opinions, tending to the support of the same; as hath been already in good part done. Surely in counsels concerning religion, that counsel of the apostle would be prefixed; "Ira hominis non implet justitiam Dei." And it was a notable observation of a wise father, and no less ingenuously confessed; That those which held and persuaded pressure of consciences, were commonly interested therein themselves for their own ends.

IV. OF REVENGE.

Revenge is a kind of wild justice, which the more man's nature runs to, the more ought law to weed it out. For as for the first wrong, it doth but offend the

law; but the revenge of that wrong putteth the law out of office. Certainly in taking revenge, a man is but even with his enemy; but in passing it over, he is superior: for it is a prince's part to pardon. And Solomon, I am sure, saith, "It is the glory of a man to pass by an offence." That which is past is gone and irrevocable, and wise men have enough to do with things present and to come: therefore they do but trifle with themselves that labour in past matters. There is no man doth a wrong for the wrong's sake; but thereby to purchase himself profit, or pleasure, or honour, or the like. Therefore why should I be angry with a man for loving himself better than me? And if any man should do wrong, merely out of ill-nature, why? yet it is but like the thorn or brier, which prick or scratch, because they can do no other. The most tolerable sort of revenge is for those wrongs which there is no law to remedy: but then let a man take heed the revenge be such as there is no law to punish; else a man's enemy is still beforehand, and it is two for one. Some, when they take revenge, are desirous the party should know whence it cometh: this is the more generous. For the delight seemeth to be not so much in doing the hurt, as in making the party repent: but base and crafty cowards are like the arrow that flieth in the dark. Cosmus, duke of Florence, had a desperate saying against perfidious or neglecting friends, as if those wrongs were unpardonable. "You shall read," saith he, "that we are commanded to forgive our enemies; but you never read, that we are commanded to forgive our friends." But yet the spirit of Job was in a better tune; "Shall we," saith he, "take good at God's hands, and not be content to take evil also?" And so of friends in a proportion. This is certain, that a man that studieth revenge, keeps his own wounds green, which otherwise would heal, and do well. Public revenges are for the most part fortunate: as that for the death of Cæsar; for the death of Pertinax; for the death of Henry the Third of France; and many more: but in private revenges it is not so; nay rather, vindicative persons live the life of witches; who as they are mischievous, so end they unfortunate.

V. OF ADVERSITY.

It was an high speech of Seneca, after the manner of the Stoics, that the good things which belong to prosperity are to be wished, but the good things that belong to adversity are to be admired: "Bona rerum secundarum optabilia, adversarum mirabilia." Certainly if miracles be the command over nature, they appear most in adversity. It is yet a higher speech of his than the other, much too high for a heathen, It is true greatness to have in one the frailty of a man, and the security of a God: "Vere magnum, habere fragilitatem hominis, securitatem Dei." This would have done better in poesy, where transcendencies are more allowed. And the poets indeed have been busy with it; for it is in effect the thing which is figured in that strange fiction of the ancient poets, which seemeth not to be without mystery; nay, and to have some approach to the state of a Christian: that Hercules, when he went to unbind Prometheus, by whom human nature is represented, sailed the length of the great ocean in an earthen pot or pitcher; lively describing Christian resolution, that saileth in the frail bark of the flesh through the waves of the world. But to speak in a mean: the virtue of prosperity is temperance; the virtue of adversity is fortitude; which in morals is the more heroical virtue. Prosperity is the blessing of the Old Testament; adversity is the blessing of the New, which carrieth the greater benediction, and the clearer revelation of God's favour. Yet, even in the Old Testament, if you listen to David's harp, you shall hear as many hearse-like airs as carols: and the pencil of the Holy Ghost hath laboured more in describing the afflictions of Job than the felicities of Solomon. Prosperity is not without many fears and distates; and adversity is not without comforts and hopes. We see in needle-works and embroideries, it is more pleasing to have a lively work upon a sad and solemn ground, than to have a dark and melancholy work upon a lightsome ground: judge therefore of the pleasure of the heart by the pleasure of the eye. Certainly virtue is

like precious odours, most fragrant when they are incensed or crushed; for prosperity doth best discover vice, but adversity doth best discover virtue.

VI. OF SIMULATION AND DISSIMULATION.

Dissimulation is but a faint kind of policy, or wisdom; for it asketh a strong wit, and a strong heart, to know when to tell truth, and to do it. Therefore it is the weaker sort of politicians that are the great dissemblers.

Tacitus saith, Livia sorted well with the arts of her husband, and dissimulation of her son; attributing arts or policy to Augustus, and dissimulation to Tiberius. And again, when Mucianus encourageth Vespasian to take arms against Vitellius, he saith; We rise not against the piercing judgment of Augustus, nor the extreme caution or closeness of Tiberius. These properties of arts or policy, and dissimulation or closeness, are indeed habits and faculties several, and to be distinguished. For if a man have that penetration of judgment as he can discern what things are to be laid open, and what to be secreted, and what to be shewed at half-lights, and to whom and when, which indeed are arts of state, and arts of life, as Tacitus well calleth them, to him a habit of dissimulation is a hindrance and a poorness. But if a man cannot obtain to that judgment, then it is left to him, generally, to be close and a dissembler. For where a man cannot choose, or vary in particulars, there it is good to take the safest and wariest way in general; like the going softly by one that cannot well see. Certainly the ablest men that ever were, have had all an openness and frankness of dealing, and a name of certainty and veracity; but then they were like horses well managed; for they could tell passing well when to stop or turn: and at such times, when they thought the case indeed required dissimulation, if then they used it, it came to pass, that the former opinion spread abroad of their good faith and clearness of dealing made them almost invisible.

There be three degrees of this hiding and veiling of a man's self. The first, closeness, reservation, and

secrecy, when a man leaveth himself without observation, or without hold to be taken, what he is. The second, dissimulation in the negative, when a man lets fall signs and arguments, that he is not that he is. And the third, simulation in the affirmative, when a man industriously and expressly feigns and pretends to be that he is not.

For the first of these, secrecy; it is indeed the virtue of a confessor; and assuredly the secret man heareth many confessions; for who will open himself to a blab or a babbler? but if a man be thought secret, it inviteth discovery; as the more close air sucketh in the more open: and as in confession the revealing is not for worldly use, but for the ease of a man's heart; so secret men come to knowledge of many things in that kind; while men rather discharge their minds, than impart their minds. In few words, mysteries are due to secrecy. Besides, to say truth, nakedness is uncomely as well in mind as body; and it addeth no small reverence to mens manners and actions if they be not altogether open. As for talkers and futile persons, they are commonly vain and credulous withal. For he that talketh what he knoweth, will also talk what he knoweth not. Therefore set it down, that an habit of secrecy is both politic and moral. And in this part it is good that a man's face give his tongue leave to speak. For the discovery of a man's self by the tracts of his countenance is a great weakness and betraying; by how much it is many times more marked and believed than a man's words.

For the second, which is dissimulation; it followeth many times upon secrecy, by a necessity: so that he that will be secret must be a dissembler in some degree. For men are too cunning to suffer a man to keep an indifferent carriage between both, and to be secret, without swaying the balance on either side. They will so beset a man with questions, and draw him on, and pick it out of him, that, without an absurd silence, he must shew an inclination one way; or if he do not, they will gather as much by his silence as by his speech. As for equivocations, or oraculous speeches, they cannot

hold out long. So that no man can be secret, except he give himself a little scope of dissimulation, which is as it were but the skirts or train of secrecy.

But for the third degree, which is simulation and false profession; that I hold more culpable and less politic, except it be in great and rare matters. And therefore a general custom of simulation, which is this last degree, is a vice rising either of a natural falseness, or fearfulness, or of a mind that hath some main faults; which because a man must needs disguise, it maketh him practise simulation in other things, lest his hand should be out of ure.

The great advantages of simulation and dissimulation are three. First, to lay asleep opposition, and to surprise. For where a man's intentions are published, it is an alarm to call up all that are against them. The second is, to reserve to a man's self a fair retreat: for if a man engage himself by a manifest declaration, he must go through, or take a fall. The third is, the better to discover the mind of another. For to him that opens himself, men will hardly shew themselves adverse; but will fair let him go on, and turn their freedom of speech to freedom of thought. And therefore it is a good shrewd proverb of the Spaniard, Tell a lie, and find a truth. As if there were no way of discovery but by simulation. There be also three disadvantages to set it even. The first, that simulation and dissimulation commonly carry with them a shew of fearfulness, which in any business doth spoil the feathers of round flying up to the mark. The second, that it puzzleth and perplexeth the conceits of many, that perhaps would otherwise co-operate with him; and makes a man walk, almost alone, to his own ends. The third and greatest is, that it depriveth a man of one of the most principal instruments for action; which is trust and belief. The best composition and temperature is, to have openness in fame and opinion; secrecy in habit; dissimulation in seasonable use; and a power to feign, if there be no remedy.

VII. OF PARENTS AND CHILDREN.

The joys of parents are secret; and so are their griefs

and fears: they cannot utter the one, nor they will not utter the other. Children sweeten labours; but they make misfortunes more bitter; they increase the cares of life, but they mitigate the remembrance of death. The perpetuity by generation is common to beasts; but memory, merit, and noble works, are proper to men: and surely a man shall see the noblest works and foundations have proceeded from childless men; which have sought to express the images of their minds, where those of their bodies have failed: so the care of posterity is most in them that have no posterity. They that are the first raisers of their houses, are most indulgent towards their children; beholding them as the continuance, not only of their kind, but of their work; and so both children and creatures.

The difference in affection of parents towards their several children is many times unequal; and sometimes unworthy; especially in the mother; as Solomon saith, "A wise son rejoiceth the father, but an ungracious son shames the mother." A man shall see, where there is a house full of children, one or two of the eldest respected, and the youngest made wantons; but in the midst, some that are as it were forgotten, who many times nevertheless prove the best. The illiberality of parents in allowance towards their children, is an harmful error; makes them base; acquaints them with shifts; makes them sort with mean company; and makes them surfeit more when they come to plenty: and therefore the proof is best when men keep their authority towards their children, but not their purse. Men have a foolish manner, both parents, and schoolmasters, and servants, in creating and breeding an emulation between brothers, during childhood, which many times sorteth to discord when they are men, and disturbeth families. The Italians make little difference between children and nephews, or near kinsfolks; but so they be of the lump they care not, though they pass not through their own body. And, to say truth, in nature it is much a like matter; insomuch that we see a nephew sometimes resembleth an uncle, or a kinsman, more than his own parent; as the blood happens. Let parents choose betimes the voca-

tions and courses they mean their children should take; for then they are most flexible; and let them not too much apply themselves to the disposition of their children, as thinking they will take best to that which they have most mind to. It is true, that if the affection or aptness of the children be extraordinary, then it is good not to cross it; but generally the precept is good, "Optimum elige, suave et facile illud faciet consuetudo." Younger brothers are commonly fortunate, but seldom or never where the elder are disinherited.

VIII. OF MARRIAGE AND SINGLE LIFE.

He that hath wife and children, hath given hostages to fortune; for they are impediments to great enterprises, either of virtue or mischief. Certainly the best works and of greatest merit for the public, have proceeded from the unmarried or childless men: which both in affection and means have married and endowed the public. Yet it were great reason, that those that have children should have greatest care of future times; unto which they know they must transmit their dearest pledges. Some there are, who though they lead a single life, yet their thoughts do end with themselves, and account future times impertinences. Nay, there are some other, that account wife and children but as bills of charges. Nay more, there are some foolish rich covetous men, that take a pride in having no children, because they may be thought so much the richer. For perhaps they have heard some talk, Such a one is a great rich man; and another except to it, Yea, but he hath a great charge of children: as if it were an abatement to his riches. But the most ordinary cause of a single life is liberty; especially in certain self-pleasing and humourous minds, which are so sensible of every restraint, as they will go near to think their girdles and garters to be bonds and shackles. Unmarried men are best friends, best masters, best servants, but not always best subjects; for they are light to run away; and almost all fugitives are of that condition. A single life doth well with churchmen: for charity will hardly water the ground, where it must first fill a pool. It is indifferent for judges and

magistrates: for if they be facile and corrupt, you shall have a servant five times worse than a wife. For soldiers, I find the generals commonly, in their hortatives, put men in mind of their wives and children. And I think the despising of marriage amongst the Turks, maketh the vulgar soldiers more base. Certainly, wife and children are a kind of discipline of humanity; and single men, though they be many times more charitable, because their means are less exhaust; yet, on the other side, they are more cruel and hard-hearted, good to make severe inquisitors, because their tenderness is not so oft called upon. Grave natures, led by custom, and therefore constant, are commonly loving husbands; as was said of Ulysses, "vetulam suam prætulit immortalitati." Chaste women are often proud and froward, as presuming upon the merit of their chastity. It is one of the best bonds, both of chastity and obedience, in the wife, if she think her husband wise; which she will never do if she find him jealous. Wives are young mens mistresses; companions for middle age; and old mens nurses. So as a man may have a quarrel to marry when he will. But yet he was reputed one of the wise men, that made answer to the question, when a man should marry? "A young man not yet, an elder man not at all." It is often seen, that bad husbands have very good wives; whether it be, that it raiseth the price of their husbands kindness when it comes; or that the wives take a pride in their patience. But this never fails if the bad husbands were of their own chusing, against their friends consent; for then they will be sure to make good their own folly.

IX. OF ENVY.

There be none of the affections which have been noted to fascinate or bewitch, but love and envy. They both have vehement wishes; they frame themselves readily into imaginations and suggestions: and they come easily into the eye; especially upon the presence of the objects; which are the points that conduce to fascination, if any such thing there be. We see likewise, the Scripture calleth envy an evil eye: and the astrolo-

gers call the evil influences of the stars, evil aspects; so that still there seemeth to be acknowledged in the act of envy, an ejaculation, or irradiation of the eye. Nay, some have been so curious, as to note, that the times when the stroke or percussion of an envious eye doth most hurt, are, when the party envied is beheld in glory or triumph; for that sets an edge upon envy: and, besides, at such times, the spirits of the person envied do come forth most into the outward parts, and so meet the blow.

But leaving these curiosities, though not unworthy to be thought on in fit place, we will handle, what persons are apt to envy others; what persons are most subject to be envied themselves; and what is the difference between public and private envy.

A man that hath no virtue in himself, ever envieth virtue in others. For mens minds will either feed upon their own good, or upon others evil; and who wanteth the one, will prey upon the other: and whoso is out of hope to attain to another's virtue, will seek to come at even hand by depressing another's fortune.

A man that is busy and inquisitive, is commonly envious: for to know much of other mens matters cannot be, because all that ado may concern his own estate: therefore it must needs be, that he taketh a kind of play-pleasure in looking upon the fortunes of others; neither can he that mindeth but his own business find much matter for envy. For envy is a gadding passion, and walketh the streets, and doth not keep home; "Non est curiosus, quin idem sit malevolus."

Men of noble birth are noted to be envious towards new men when they rise: for the distance is altered; and it is like a deceit of the eye, that when others come on, they think themselves go back.

Deformed persons and eunuchs, and old men and bastards, are envious: for he that cannot possibly mend his own case, will do what he can to impair another's; except these defects light upon a very brave and heroical nature, which thinketh to make his natural wants part of his honour; in that it should be said, that an eunuch or a lame man did such great matters; affecting the ho-

nour of a miracle; as it was in Narses the eunuch, and Agesilaus and Tamerlane, that were lame men.

The same is the case of men that rise after calamities and misfortunes; for they are as men fallen out of the times; and think other mens harms a redemption of their own sufferings.

They that desire to excel in too many matters, out of levity and vain-glory, are ever envious, for they cannot want work; it being impossible but many, in some one of those things, should surpass them. Which was the character of Adrian the emperor, that mortally envied poets, and painters, and artificers, in works wherein he had a vein to excel

Lastly, near kinsfolks, and fellows in office, and those that have been bred together, are more apt to envy their equals when they are raised. For it doth upbraid unto them their own fortunes, and pointeth at them, and cometh oftener into their remembrance, and incurreth likewise more into the note of others; and envy ever redoubleth from speech and fame. Cain's envy was the more vile and malignant towards his brother Abel, because, when his sacrifice was better accepted, there was no body to look on. Thus much for those that are apt to envy.

Concerning those that are more or less subject to envy: First, persons of eminent virtue, when they are advanced, are less envied. For their fortune seemeth but due unto them; and no man envieth the payment of a debt, but rewards, and liberality rather. Again, envy is ever joined with the comparing of a man's self; and where there is no comparison, no envy; and therefore kings are not envied but by kings. Nevertheless it is to be noted, that unworthy persons are most envied at their first coming in, and afterwards overcome it better; whereas contrariwise, persons of worth and merit are most envied when their fortune continueth long. For by that time, though their virtue be the same, yet it hath not the same lustre; for fresh men grow up that darken it.

Persons of noble blood are less envied in their rising; for it seemeth but right done to their birth: besides, there seemeth not much added to their fortune; and

envy is as the sun-beams, that beat hotter upon a bank or steep rising ground than upon a flat. And for the same reason, those that are advanced by degrees, are less envied than those that are advanced suddenly, and per saltum.

Those that have joined with their honour, great travels, cares, or perils, are less subject to envy: for men think that they earn their honours hardly, and pity them sometimes; and pity ever healeth envy: wherefore you shall observe, that the more deep and sober sort of politic persons, in their greatness, are ever bemoaning themselves what a life they lead, chanting a "Quanta patimur:" not that they feel it so, but only to abate the edge of envy. But this is to be understood of business that is laid upon men, and not such as they call unto themselves: for nothing increaseth envy more, than an unnecessary and ambitious ingrossing of business: and nothing doth extinguish envy more, than for a great person to preserve all other inferior officers in their full rights and pre-eminences of their places: for by that means there be so many screens between him and envy.

Above all, those are most subject to envy, which carry the greatness of their fortunes in an insolent and proud manner: being never well but while they are shewing how great they are, either by outward pomp, or by triumphing over all opposition or competition: whereas wise men will rather do sacrifice to envy, in suffering themselves sometimes of purpose to be crossed and overborn in things that do not much concern them. Notwithstanding, so much is true: that the carriage of greatness in a plain and open manner, so it be without arrogancy and vain-glory, doth draw less envy, than if it be in a more crafty and cunning fashion. For in that course a man doth but disavow fortune, and seemeth to be conscious of his own want in worth, and doth but teach others to envy him.

Lastly, to conclude this part; as we said in the beginning, that the act of envy had somewhat in it of witchcraft, so there is no other cure of envy, but the cure of witchcraft: and that is, to remove the lot, as they call it, and to lay it upon another. For which purpose,

the wiser sort of great persons bring in ever upon the stage somebody upon whom to derive the envy that would come upon themselves; sometimes upon ministers and servants, sometimes upon colleagues and associates, and the like: and for that turn, there are never wanting some persons of violent and undertaking natures, who, so they may have power and business, will take it at any cost.

Now to speak of public envy. There is yet some good in public envy, whereas in private there is none. For public envy is as an ostracism, that eclipseth men when they grow too great: and therefore it is a bridle also to great ones, to keep them within bounds.

This envy, being in the Latin word *invidia*, goeth in the modern languages by the name of discontentment; of which we shall speak in handling sedition. It is a disease in a state like to infection: for as infection spreadeth upon that which is sound, and tainteth it; so when envy is gotten once into a state, it traduceth even the best actions thereof, and turneth them into an ill odour; and therefore there is little won by intermingling of plausible actions: for that doth argue but a weakness and fear of envy, which hurteth so much the more; as it is likewise usual in infections, which if you fear them, you call them upon you.

This public envy seemeth to beat chiefly upon principal officers or ministers, rather than upon kings and estates themselves. But this is a sure rule, that if the envy upon the minister be great, when the cause of it in him is small; or if the envy be general in a manner upon all the ministers of an estate, then the envy, though hidden, is truly upon the state itself. And so much of public envy or discontentment, and the difference thereof from private envy, which was handled in the first place.

We will add this in general touching the affection of envy: that of all other affections, it is the most importune and continual: for of other affections there is occasion given but now and then; and therefore it is well said, "Invidia festos dies non agit:" for it is ever working upon some other. And it is also noted, that love

and envy do make a man pine, which other affections do not, because they are not so continual. It is also the vilest affection, and the most depraved; for which cause it is the proper attribute of the devil, who is called, "the envious man, that soweth tares amongst the wheat by night:" as it always cometh to pass, that envy worketh subtilly, and in the dark; and to the prejudice of good things, such as is the wheat.

X. OF LOVE.

The stage is more beholden to love, than the life of man. For as to the stage, love is ever matter of comedies, and now and then of tragedies; but in life it doth much mischief, sometimes like a siren, sometimes like a fury. You may observe, that amongst all the great and worthy persons, whereof the memory remaineth, either ancient or recent, there is not one that hath been transported to the mad degree of love; which shews, that great spirits and great business do keep out this weak passion. You must except nevertheless Marcus Antonius the half partner of the empire of Rome, and Appius Claudius the decemvir and lawgiver; whereof the former was indeed a voluptuous man and inordinate; but the latter was an austere and wise man: and therefore it seems, though rarely, that love can find entrance, not only into an open heart, but also into a heart well fortified, if watch be not well kept. It is a poor saying of Epicurus; "Satis magnum alter alteri theatrum sumus:" as if man, made for the contemplation of heaven, and all noble objects, should do nothing but kneel before a little idol, and make himself subject, though not of the mouth, as beasts are, yet of the eye, which was given him for higher purposes. It is a strange thing to note the excess of this passion; and how it braves the nature and value of things by this, that the speaking in a perpetual hyperbole is comely in nothing but in love. Neither is it merely in the phrase; for whereas it hath been well said, that the arch flatterer, with whom all the petty flatterers have intelligence, is a man's self; certainly the lover is more. For there was never proud man thought so absurdly well of

himself, as the lover doth of the person loved; and therefore it was well said, that it is impossible to love, and to be wise. Neither doth this weakness appear to others only, and not to the party loved, but to the loved most of all; except the love be reciproque. For it is a true rule, that love is ever rewarded either with the reciproque, or with an inward and secret contempt: by how much the more men ought to beware of this passion, which loseth not only other things, but itself. As for the other losses, the poet's relation doth well figure them; that he that preferred Helena, quitted the gifts of Juno and Pallas: for whosoever esteemeth too much of amorous affection, quitteth both riches and wisdom. This passion hath its floods in the very times of weakness, which are great prosperity, and great adversity; though this latter hath been less observed: both which times kindle love, and make it more fervent, and therefore, shew it to be the child of folly. They do best, who, if they cannot but admit love, yet make it keep quarter; and sever it wholly from their serious affairs and actions of life: for if it check once with business, it troubleth mens fortunes, and maketh men that they can no ways be true to their own ends. I know not how, but martial men are given to love: I think it is, but as they are given to wine; for perils commonly ask to be paid in pleasures. There is in man's nature a secret inclination and motion towards love of others, which, if it be not spent upon some one or a few, doth naturally spread itself towards many, and maketh men become humane and charitable; as it is seen sometimes in friers. Nuptial love maketh mankind; friendly love perfecteth it; but wanton love corrupteth and embaseth it.

XI. OF GREAT PLACE.

Men in great place are thrice servants: servants of the sovereign or state; servants of fame; and servants of business: so as they have no freedom, neither in their persons, nor in their actions, nor in their times. It is a strange desire, to seek power, and to lose liberty; or to seek power over others, and to lose power over a man's self. The rising unto place is laborious; and by pains

men come to greater pains; and it is sometimes base; and by indignities men come to dignities. The standing is slippery, and the regress is either a downfall, or at least an eclipse, which is a melancholy thing. "Cum non sis qui fueris, non esse cur velis vivere?" Nay, retire men cannot when they would; neither will they when it were reason; but are impatient of privateness, even in age and sickness, which require the shadow: like old townsmen, that will be still sitting at their street door, though thereby they offer age to scorn. Certainly great persons had need to borrow other mens opinions to think themselves happy; for if they judge by their own feeling, they cannot find it; but if they think with themselves what other men think of them, and that other men would fain be as they are, then they are happy as it were by report, when perhaps they find the contrary within. For they are the first that find their own griefs; though they be the last that find their own faults. Certainly men in great fortunes are strangers to themselves, and while they are in the puzzle of business, they have no time to tend their health either of body or mind. "Illi mors gravis incubat, qui notus nimis omnibus, ignotus moritur sibi." In place there is licence to do good and evil; whereof the latter is a curse; for in evil the best condition is not to will; the second not to can. But power to do good is the true and lawful end of aspiring. For good thoughts, though God accept them, yet towards men are little better than good dreams, except they be put in act; and that cannot be without power and place; as the vantage and commanding ground. Merit and good works is the end of man's motion; and conscience of the same is the accomplishment of man's rest. For if a man can be partaker of God's theatre, he shall likewise be partaker of God's rest. "Et conversus Deus, ut aspiceret opera, quæ fecerunt manus suæ, vidit quod omnia essent bona nimis;" and then the sabbath. In the discharge of thy place, set before thee the best examples; for imitation is a globe of precepts. And after a time set before thee thine own example; and examine thyself strictly, whether thou didst not best at first. Neglect not also

the examples of those, that have carried themselves ill in the same place: not to set off thyself by taxing their memory; but to direct thyself what to avoid. Reform therefore, without bravery or scandal of former times and persons; but yet set it down to thyself, as well to create good precedents, as to follow them. Reduce things to the first institution, and observe wherein and how they have degenerated; but yet ask counsel of both times: of the ancient time what is best; and of the latter time what is fittest. Seek to make thy course regular; that men may know beforehand what they may expect: but be not too positive and peremptory; and express thyself well when thou digressest from thy rule. Preserve the right of thy place, but stir not questions of jurisdiction: and rather assume thy right in silence, and de facto, than voice it with claims and challenges. Preserve likewise the rights of inferior places: and think it more honour to direct in chief, than to be busy in all. Embrace and invite helps and advices touching the execution of thy place; and do not drive away such as bring thee information, as medlers, but accept of them in good part. The vices of authority are chiefly four; delays, corruption, roughness, and facility. For delays; give easy access; keep times appointed; go through with that which is in hand; and interlace not business but of necessity. For corruption; do not only bind thine own hands, or thy servants hand, from taking, but bind the hands of suitors also from offering. For integrity used doth the one; but integrity professed, and with a manifest detestation of bribery, doth the other: and avoid not only the fault, but the suspicion. Whosoever is found variable, and changeth manifestly without manifest cause, giveth suspicion of corruption. Therefore always when thou changest thine opinion or course, profess it plainly, and declare it, together with the reasons that move thee to change; and do not think to steal it. A servant or a favourite, if he be inward, and no other apparent cause of esteem, is commonly thought but a bye-way to close corruption. For roughness, it is a needless cause of discontent; severity breedeth fear, but roughness breedeth hate. Even reproofs from authority ought to be grave,

and not taunting. As for facility, it is worse than bribery. For bribes come but now and then; but if importunity or idle respects lead a man, he shall never be without. As Solomon saith; "to respect persons is not good; for such a man will transgress for a piece of bread." It is most true that was anciently spoken, "A place sheweth the man:" and it sheweth some to the better, and some to the worse; "omnium consensu, capax imperii, nisi imperasset," saith Tacitus of Galba: but of Vespasian he saith; "solus imperantium Vespasianus mutatus in melius." Though the one was meant of sufficiency, the other of manners and affection. It is an assured sign of a worthy and generous spirit, whom honour amends. For honour is, or should be, the place of virtue: and as in nature things move violently to their place, and calmly in their place; so virtue in ambition is violent, in authority settled and calm. All rising to great place is by a winding-stair; and if there be factions, it is good to side a man's self whilst he is in the rising; and to balance himself when he is placed. Use the memory of thy predecessor fairly and tenderly; for if thou dost not, it is a debt will sure be paid when thou art gone. If thou have colleagues, respect them, and rather call them when they look not for it, than exclude them when they have reason to look to be called. Be not too sensible, or too remembering of thy place in conversation, and private answers to suitors; but let it rather be said, When he sits in place he is another man.

XII. OF BOLDNESS.

It is a trivial grammar-school text, but yet worthy a wise man's consideration. Question was asked of Demosthenes, what was the chief part of an orator? He answered, Action. What next?—Action. What next again?—Action. He said it that knew it best; and had by nature himself no advantage in that he commended. A strange thing, that that part of an orator, which is but superficial, and rather the virtue of a player, should be placed so high above those other noble parts of invention, elocution, and the rest: nay almost alone, as if it were all in all. But the reason is plain. There

is in human nature, generally, more of the fool than of the wise; and therefore those faculties by which the foolish part of mens minds is taken, are most potent. Wonderful like is the case of boldness in civil business; what first?—Boldness. What second and third?—Boldness. And yet boldness is a child of ignorance and baseness, far inferior to other parts. But nevertheless it doth fascinate, and bind hand and foot those that are either shallow in judgment, or weak in courage, which are the greatest part; yea, and prevaileth with wise men at weak times: therefore we see it hath done wonders in popular states, but with senates and princes less; and more ever upon the first entrance of bold persons into action, than soon after; for boldness is an ill keeper of promise. Surely, as there are mountebanks for the natural body, so there are mountebanks for the politic body: men that undertake great cures, and perhaps have been lucky in two or three experiments, but want the grounds of science, and therefore cannot hold out: nay, you shall see a bold fellow many times do Mahomet's miracle. Mahomet made the people believe that he would call an hill to him, and from the top of it offer up prayers for the observers of his law. The people assembled: Mahomet called the hill to come to him again and again; and when the hill stood still he was never a whit abashed, but said, "If the hill will not come to Mahomet, Mahomet will go to the hill." So these men when they have promised great matters, failed most shamefully, yet, if they have the perfection of boldness, they will but slight it over, and make a turn, and no more ado. Certainly to men of great judgment bold persons are a sport to behold; nay, and to the vulgar also boldness hath somewhat of the ridiculous: for if absurdity be the subject of laughter, doubt you not but great boldness is seldom without some absurdity: especially it is a sport to see when a bold fellow is out of countenance, for that puts his face into a most shrunken and wooden posture, as needs it must; for in bashfulness the spirits do a little go and come; but with bold men, upon like occasion, they stand at a stay; like a stale at chess, where it is no mate, but yet the

game cannot stir: but this last were fitter for a satire, than for a serious observation. This is well to be weighed, that boldness is ever blind; for it seeth not dangers and inconveniences: therefore it is ill in counsel, good in execution: so that the right use of bold persons is, that they never command in chief, but be seconds, and under the direction of others. For in counsel, it is good to see dangers; and in execution not to see them, except they be very great.

XIII. OF GOODNESS, AND GOODNESS OF NATURE.

I take goodness in this sense, the affecting of the weal of men, which is that the Grecians called *philanthropia;* and the word humanity, as it is used, is a little too light to express it. Goodness I call the habit, and goodness of nature the inclination. This of all virtues and dignities of the mind is the greatest, being the character of the Deity; and without it man is a busy, mischievous, wretched thing, no better than a kind of vermin. Goodness answers to the theological virtue charity, and admits no excess but error. The desire of power in excess caused the angels to fall; the desire of knowledge in excess caused man to fall: but in charity there is no excess; neither can angel or man come in danger by it. The inclination to goodness is imprinted deeply in the nature of man; insomuch, that if it issue not towards men, it will take unto other living creatures; as it is seen in the Turks, a cruel people, who nevertheless are kind to beasts, and give alms to dogs and birds: insomuch, as Busbechius reporteth, a Christian boy in Constantinople had like to have been stoned, for gagging, in a waggishness, a long-billed fowl. Errors indeed in this virtue of goodness or charity may be committed. The Italians have an ungracious proverb; "Tanto buon che val niente;" So good that he is good for nothing. And one of the doctors of Italy, Nicholas Machiavel, had the confidence to put in writing, almost in plain terms, that the Christian faith had given up good men in prey to those that are tyrannical and unjust: which he spake, because indeed there was never law, or sect, or opinion, did so much magnify goodness,

as the Christian religion doth: therefore to avoid the scandal, and the danger both, it is good to take knowledge of the errors of an habit so excellent. Seek the good of other men, but be not in bondage to their faces or fancies; for that is but facility or softness, which taketh an honest mind prisoner. Neither give thou Æsop's cock a gem, who would be better pleased, and happier if he had a barley-corn. The example of God teacheth the lesson truly; "he sendeth his rain and maketh his sun to shine upon the just and the unjust;" but he doth not rain wealth nor shine honour and virtues upon men equally: common benefits are to be communicated with all, but peculiar benefits with choice. And beware, how in making the portraiture thou breakest the pattern; for divinity maketh the love of ourselves the pattern, the love of our neighbours but the portraiture: "Sell all thou hast, and give it to the poor, and follow me." But sell not all thou hast, except thou come and follow me; that is, except thou have a vocation, wherein thou mayest do as much good with little means as with great: for otherwise, in feeding the streams thou driest the fountain. Neither is there only a habit of goodness directed by right reason; but there is in some men, even in nature, a disposition towards it; as on the other side there is a natural malignity. For there be, that in their nature do not affect the good of others. The lighter sort of malignity turneth but to a crossness, or frowardness, or aptness to oppose, or difficilness, or the like; but the deeper sort to envy, and mere mischief. Such men, in other mens calamities, are as it were in season, and are ever on the loading part: not so good as the dogs that licked Lazarus' sores, but like flies that are still buzzing upon any thing that is raw; Misanthropi, that make it their practice to bring men to the bough, and yet have never a tree for the purpose in their gardens, as Timon had. Such dispositions are the very errors of human nature, and yet they are the fittest timber to make great politics of; like to knee-timber, that is good for ships that are ordained to be tossed, but not for building houses that shall stand firm. The parts and signs of goodness are many. If

a man be gracious and courteous to strangers, it shews he is a citizen of the world, and that his heart is no island cut off from other lands, but a continent that joins to them. If he be compassionate towards the afflictions of others, it shews that his heart is like the noble tree that is wounded itself when it gives the balm. If he easily pardons and remits offences, it shews that his mind is planted above injuries, so that he cannot be shot. If he be thankful for small benefits, it shews that he weighs mens minds, and not their trash. But above all, if he have St. Paul's perfection, that he would wish to be an anathema from Christ for the salvation of his brethren, it shews much of a divine nature, and a kind of conformity with Christ himself.

XIV. OF NOBILITY.

We will speak of nobility first as a portion of an estate, then as a condition of particular persons. A monarchy, where there is no nobility at all, is ever a pure and absolute tyranny; as that of the Turks: for nobility attempers sovereignty, and draws the eyes of the people somewhat aside from the line royal. But for democracies, they need it not; and they are commonly more quiet, and less subject to sedition, than where there are stirps of nobles; for mens eyes are upon the business, and not upon the persons: or if upon the persons, it is for the business sake, as fittest, and not for flags and pedigree. We see the Switzers last well, notwithstanding their diversity of religion, and of cantons; for utility is their bond, and not respects. The United Provinces of the Low Countries, in their government, excel: for where there is an equality, the consultations are more indifferent, and the payments and tributes more cheerful. A great and potent nobility addeth majesty to a monarch, but diminisheth power; and putteth life and spirit into the people, but presseth their fortune. It is well when nobles are not too great for sovereignty, nor for justice; and yet maintained in that height, as the insolency of inferiors may be broken upon them, before it come on too fast upon the majesty of kings. A numerous nobility causeth

poverty and inconvenience in a state, for it is a surcharge of expence; and besides, it being of necessity that many of the nobility fall in time to be weak in fortune, it maketh a kind of disproportion between honour and means.

As for nobility in particular persons; it is a reverend thing to see an ancient castle or building not in decay; or to see a fair timber tree sound and perfect; how much more to behold an ancient noble family, which hath stood against the waves and weathers of time? for new nobility is but the act of power, but ancient nobility is the act of time. Those that are first raised to nobility, are commonly more virtuous, but less innocent, than their descendants; for there is rarely any rising, but by a commixture of good and evil arts: but it is reason the memory of their virtues remain to their posterity, and their faults die with themselves. Nobility of birth commonly abateth industry; and he that is not industrious envieth him that is. Besides, noble persons cannot go much higher; and he that standeth at a stay, when others rise, can hardly avoid motions of envy. On the other side, nobility extinguisheth the passive envy from others towards them, because they are in possession of honour. Certainly kings that have able men of their nobility, shall find ease in employing them, and a better slide into their business: for people naturally bend to them, as born in some sort to command.

XV. OF SEDITIONS AND TROUBLES.

Shepherds of people had need know the kalendars of tempests in state; which are commonly greatest when things grow to equality; as natural tempests are greatest about the equinoctia. And as there are certain hollow blasts of wind, and secret swellings of seas, before a tempest, so are there in states:

> Ille etiam cæcos instare tumultus
> Sæpe monet, fraudesque et operta tumescere bella.

Libels and licentious discourses against the state, when they are frequent and open, and in like sort false

news often running up and down to the disadvantage of the state, and hastily embraced, are amongst the signs of troubles. Virgil giving the pedigree of Fame, saith, she was sister to the giants.

> Illam Terra parens, ira irritata Deorum,
> Extremam, ut perhibent, Cæo Enceladoque sororem
> Progenuit.

As if fames were the relicks of seditions past: but they are no less indeed the preludes of seditions to come. Howsoever he noteth it right, that seditious tumults, and seditious fames, differ no more, but as brother and sister, masculine and feminine; especially if it come to that, that the best actions of a state, and the most plausible, and which ought to give greatest contentment, are taken in ill sense and traduced: for that shews the envy great, as Tacitus saith; "conflata magna invidia, seu bene, seu male, gesta premunt." Neither doth it follow, that because these fames are a sign of troubles, that the suppressing of them with too much severity should be a remedy of troubles. For the despising of them many times checks them best: and the going about to stop them, doth but make a wonder long-lived. Also that kind of obedience which Tacitus speaketh of, is to be held suspected; "Erant in officio, sed tamen qui mallent mandata imperantium interpretari quam exequi;" disputing, excusing, cavilling upon mandates, and directions, is a kind of shaking off the yoke, and assay of disobedience: especially if in those disputings, they which are for the direction, speak fearfully and tenderly; and those that are against it, audaciously.

Also, as Machiavel noteth well, when princes, that ought to be common parents, make themselves as a party, and lean to a side, it is as a boat that is overthrown by uneven weight on the one side: as was well seen in the time of Henry the third of France; for first, himself entered league for the extirpation of the protestants; and presently after the same league was turned upon himself. For when the authority of princes is made but an accessary to a cause, and that there be

other bands, that tie faster than the band of sovereignty, kings begin to be put almost out of possession.

Also, when discords, and quarrels, and factions, are carried openly and audaciously, it is a sign the reverence of government is lost. For the motions of the greatest persons in a government ought to be as the motions of the planets under primum mobile, according to the old opinion; which is, that every of them is carried swiftly by the highest motion, and softly in their own motion. And therefore when great ones in their own particular motion move violently, and, as Tacitus expresseth it well, "liberius, quam ut imperantium meminissent;" it is a sign the orbs are out of frame. For reverence is that wherewith princes are girt from God, who threateneth the dissolving thereof; "solvam cingula regum."

So when any of the four pillars of government are mainly shaken or weakened, which are religion, justice, counsel, and treasure, men had need to pray for fair weather. But let us pass from this part of predictions, concerning which, nevertheless, more light may be taken from that which followeth, and let us speak first of the materials of seditions; then of the motives of them; and thirdly, of the remedies.

Concerning the materials of seditions. It is a thing well to be considered; for the surest way to prevent seditions, if the times do bear it, is to take away the matter of them. For if there be fuel prepared, it is hard to tell whence the spark shall come that shall set it on fire. The matter of seditions is of two kinds: much poverty, and much discontentment. It is certain, so many overthrown estates, so many votes for troubles. Lucan noteth well the state of Rome before the civil war:

> Hinc usura vorax, rapidumque in tempore fœnus,
> Hinc concussa fides, et multis utile bellum.

This same "multis utile bellum" is an assured and infallible sign of a state disposed to seditions and troubles. And if this poverty and broken estate in the better sort be joined with a want and necessity in the mean people,

the danger is imminent and great. For the rebellions of the belly are the worst. As for discontentments, they are in the politic body like to humours in the natural, which are apt to gather a preternatural heat, and to inflame. And let no prince measure the danger of them by this; whether they be just, or unjust; for that were to imagine people to be too reasonable; who do often spurn at their own good: nor yet by this; whether the griefs whereupon they rise be in fact great or small. For they are the most dangerous discontentments, where the fear is greater than the feeling. "Dolendi modus, timendi non item." Besides, in great oppressions, the same things that provoke the patience, do withal mate the courage; but in fears it is not so. Neither let any prince or state be secure concerning discontentments, because they have been often, or have been long, and yet no peril hath ensued; for as it is true that every vapour, or fume, doth not turn into a storm; so it is nevertheless true, that storms, though they blow over divers times, yet may fall at last; and as the Spanish proverb noteth well, the cord breaketh at the last by the weakest pull.

The causes and motives of seditions are, innovation in religion, taxes, alteration of laws and customs, breaking of privileges, general oppression, advancement of unworthy persons, strangers, dearths, disbanded soldiers, factions grown desperate; and whatsoever in offending people joineth and knitteth them in a common cause.

For the remedies, there may be some general preservatives, whereof we will speak; as for the just cure, it must answer to the particular disease: and so be left to counsel, rather than rule.

The first remedy or prevention, is to remove by all means possible that material cause of sedition, whereof we spake; which is want and poverty in the estate. To which purpose serveth the opening and well balancing of trade; the cherishing of manufactures; the banishing of idleness; the repressing of waste and excess by sumptuary laws; the improvement and husbanding of the soil; the regulating of prices of things vendible; the moderating of taxes and tributes, and the

like. Generally it is to be foreseen, that the population of a kingdom, especially if it be not mown down by wars, do not exceed the stock of the kingdom which should maintain them. Neither is the population to be reckoned only by number: for a smaller number, that spend more, and earn less, do wear out an estate sooner than a greater number that live lower and gather more. Therefore the multiplying of nobility, and other degrees of quality, in an over-proportion to the common people, doth speedily bring a state to necessity: and so doth likewise an overgrown clergy; for they bring nothing to the stock: and in like manner, when more are bred scholars, than preferments can take off.

It is likewise to be remembered, that forasmuch as the increase of any estate must be upon the foreigner, for whatsoever is somewhere gotten is somewhere lost, there be but three things which one nation selleth unto another; the commodity as nature yieldeth it; the manufacture; and the vecture or carriage. So that if these three wheels go, wealth will flow as in a spring tide. And it cometh many times to pass, that "materiam superabit opus," that the work and carriage is more worth than the material, and enricheth a state more; as is notably seen in the Low-Countrymen, who have the best mines above ground in the world.

Above all things good policy is to be used, that the treasure and moneys in a state be not gathered into few hands. For otherwise a state may have a great stock, and yet starve. And money is like muck, not good except it be spread. This is done chiefly by suppressing, or at the least keeping a strait hand upon the devouring trades of usury, ingrossing, great pasturages, and the like.

For removing discontentments, or at least the danger of them: there is in every state, as we know, two portions of subjects, the noblesse, and the commonalty. When one of these is discontent, the danger is not great; for common people are of slow motion, if they be not excited by the greater sort; and the greater sort are of small strength, except the multitude be apt and ready to move of themselves. Then is the danger, when the

greater sort do but wait for the troubling of the waters amongst the meaner, that then they may declare themselves. The poets feign, that the rest of the gods would have bound Jupiter; which he hearing of, by the counsel of Pallas, sent for Briareus with his hundred hands to come in to his aid. An emblem, no doubt, to shew, how safe it is for monarchs to make sure of the good will of common people.

To give moderate liberty for griefs and discontentments to evaporate, so it be without too great insolency or bravery, is a safe way. For he that turneth the humours back, and maketh the wound bleed inwards, endangereth malign ulcers, and pernicious impostumations.

The part of Epimetheus might well become Prometheus, in the case of discontentments, for there is not a better provision against them. Epimetheus, when griefs and evils flew abroad, at last shut the lid, and kept Hope in the bottom of the vessel. Certainly the politic and artificial nourishing and entertaining of hopes, and carrying men from hopes to hopes, is one of the best antidotes against the poison of discontentments. And it is a certain sign of a wise government and proceeding, when it can hold mens hearts by hopes, when it cannot by satisfaction: and when it can handle things in such manner, as no evil shall appear so peremptory, but that it hath some outlet of hope; which is the less hard to do, because both particular persons and factions are apt enough to flatter themselves, or at least to brave that which they believe not.

Also, the foresight and prevention that there be no likely or fit head, whereunto discontented persons may resort, and under whom they may join, is a known but an excellent point of caution. I understand a fit head to be one that hath greatness and reputation; that hath confidence with the discontented party, and upon whom they turn their eyes; and that is thought discontented in his own particular: which kind of persons are either to be won and reconciled to the state, and that in a fast and true manner; or to be fronted with some other of the same party that may oppose them, and so divide the

reputation. Generally, the dividing and breaking of all factions and combinations that are adverse to the state, and setting them at distance, or at least distrust amongst themselves, is not one of the worst remedies. For it is a desperate case, if those that hold with the proceedings of the state, be full of discord and faction; and those that are against it be entire and united.

I have noted, that some witty and sharp speeches which have fallen from princes, have given fire to seditions. Cæsar did himself infinite hurt in that speech; "Sylla nescivit literas, non potuit dictare:" for it did utterly cut off that hope which men had entertained, that he would at one time or other give over his dictatorship. Galba undid himself by that speech; "Legi a se militem, non emi:" for it put the soldiers out of the hope of the donative. Probus likewise by that speech, "Si vixero, non opus erit amplius Romano imperio militibus;" a speech of great despair for the soldiers: and many the like. Surely, princes had need, in tender matters and ticklish times, to beware what they say; especially in these short speeches, which fly abroad like darts, and are thought to be shot out of their secret intentions. For, as for large discourses, they are flat things, and not so much noted.

Lastly, let princes, against all events, not be without some great person, one, or rather more, of military valour near unto them, for the repressing of seditions in their beginnings. For without that, there useth to be more trepidation in court upon the first breaking out of troubles, than were fit. And the state runneth the danger of that which Tacitus saith, "atque is habitus animorum fuit, ut pessimum facinus auderent pauci, plures vellent, omnes paterentur." But let such military persons be assured and well reputed of, rather than factious and popular; holding also good correspondence with the other great men in the state; or else the remedy is worse than the disease.

XVI. OF ATHEISM.

I had rather believe all the fables in the Legend, and the Talmud, and the Alcoran, than that this universal

frame is without a mind. And therefore God never wrought miracle to convince atheism, because his ordinary works convince it. It is true, that a little philosophy inclineth man's mind to atheism; but depth in philosophy bringeth mens minds about to religion: for while the mind of man looketh upon second causes scattered, it may sometimes rest in them, and go no farther; but when it beholdeth the chain of them confederate and linked together, it must needs fly to Providence and Deity. Nay even that school which is most accused of atheism, doth most demonstrate religion; that is, the school of Leucippus, and Democritus, and Epicurus. For it is a thousand times more credible, that four mutable elements, and one immutable fifth essence duly and eternally placed, need no God; than that an army of infinite small portions, or seeds unplaced, should have produced this order and beauty without a divine marshal. The Scripture saith, "The fool hath said in his heart, There is no God:" it is not said, "the fool hath thought in his heart." So as he rather saith it by rote to himself, as that he would have, than that he can thoroughly believe it, or be persuaded of it. For none deny there is a God, but those for whom it maketh that there were no God. It appeareth in nothing more, that atheism is rather in the lip than in the heart of man, than by this; that atheists will ever be talking of that their opinion, as if they fainted in it within themselves, and would be glad to be strengthened by the consent of others: nay more, you shall have atheists strive to get disciples, as it fareth with other sects: and, which is most of all, you shall have of them that will suffer for atheism, and not recant; whereas if they did truly think that there were no such thing as God, why should they trouble themselves? Epicurus is charged, that he did but dissemble, for his credit's sake, when he affirmed there were blessed natures, but such as enjoyed themselves without having respect to the government of the world. Wherein they say he did temporize, though in secret he thought there was no God. But certainly he is traduced; for his words are noble and divine: "Non deos vulgi negare profanum; sed vulgi opiniones diis applicare profanum."

Plato could have said no more. And although he had the confidence to deny the administration, he had not the power to deny the nature. The Indians of the west have names for their particular gods, though they have no name for God: as if the heathens should have had the names Jupiter, Apollo, Mars, etc. but not the word *Deus;* which shews, that even those barbarous people have the notion, though they have not the latitude and extent of it. So that against atheists the very savages take part with the very subtilest philosophers. The contemplative atheist is rare; a Diagoras, a Bion, a Lucian perhaps, and some others; and yet they seem to be more than they are; for that all that impugn a received religion, or superstition, are by the adverse part branded with the name of atheists. But the great atheists indeed are hypocrites; which are ever handling holy things, but without feeling; so as they must needs be cauterized in the end. The causes of atheism are; divisions in religion, if they be many; for any one main division addeth zeal to both sides; but many divisions introduce atheism. Another is, scandal of priests; when it is come to that which S. Bernard saith, "non est jam dicere, ut populus, sic sacerdos: quia nec sic populus, ut sacerdos." A third is, custom of profane scoffing in holy matters; which doth by little and little deface the reverence of religion. And lastly, learned times, especially with peace and prosperity: for troubles and adversities do more bow mens minds to religion. They that deny a God destroy man's nobility: for certainly man is of kin to the beasts by his body; and if he be not of kin to God by his spirit, he is a base and ignoble creature. It destroys likewise magnanimity, and the raising of human nature: for take an example of a dog, and mark what a generosity and courage he will put on, when he finds himself maintained by a man; who to him is instead of a God, or melior natura: which courage is manifestly such, as that creature, without that confidence of a better nature than his own, could never attain. So man, when he resteth and assureth himself upon divine protection and favour, gathereth a force and faith, which human nature in itself could not obtain: therefore as atheism is in all

respects hateful, so in this, that it depriveth human nature of the means to exalt itself above human frailty. As it is in particular persons, so it is in nations: never was there such a state for magnanimity as Rome; of this state hear what Cicero saith: "Quam volumus, licet, patres conscripti, nos amemus, tamen nec numero Hispanos, nec robore Gallos, nec calliditate Pœnos, nec artibus Græcos, nec denique hoc ipso hujus gentis et terræ domestico nativoque sensu Italos ipsos et Latinos; sed pietate, ac religione, atque hac una sapientia, quod deorum immortalium numine omnia regi gubernarique perspeximus, omnes gentes nationesque superavimus."

XVII. OF SUPERSTITION.

It were better to have no opinion of God at all, than such an opinion as is unworthy of him: for the one is unbelief, the other is contumely: and certainly superstition is the reproach of the Deity. Plutarch saith well to that purpose: "Surely," saith he, "I had rather a great deal men should say, there was no such man at all as Plutarch, than that they should say, that there was one Plutarch, that would eat his children as soon as they were born; as the poets speak of Saturn." And as the contumely is greater towards God, so the danger is greater towards men. Atheism leaves a man to sense, to philosophy, to natural piety, to laws, to reputation; all which may be guides to an outward moral virtue, though religion were not: but superstition dismounts all these, and erecteth an absolute monarchy in the minds of men. Therefore atheism did never perturb states; for it makes men wary of themselves, as looking no farther: and we see the times inclined to atheism, as the time of Augustus Cæsar, were civil times. But superstition hath been the confusion of many states; and bringeth in a new primum mobile, that ravisheth all the spheres of government. The master of superstition is the people; and in all superstition wise men follow fools; and arguments are fitted to practice in a reversed order. It was gravely said by some of the prelates in the Council of Trent, where the doctrine of the schoolmen bare great sway; that the schoolmen were like astronomers, which did feign

eccentrics and epicycles, and such engines of orbs, to save the phænomena, though they knew there were no such things; and in like manner, that the schoolmen had framed a number of subtile and intricate axioms and theorems, to save the practice of the Church. The causes of superstition are: pleasing and sensual rites and ceremonies: excess of outward and pharisaical holiness: overgreat reverence of traditions, which cannot but load the Church: the stratagems of prelates for their own ambition and lucre: the favouring too much of good intentions, which openeth the gate to conceits and novelties: the taking an aim at divine matters by human, which cannot but breed mixture of imaginations: and lastly, barbarous times, especially joined with calamities and disasters. Superstition without a veil is a deformed thing: for as it addeth deformity to an ape to be so like a man; so the similitude of superstition to religion makes it the more deformed. And as wholesome meat corrupteth to little worms, so good forms and orders corrupt into a number of petty observances. There is a superstition in avoiding superstition; when men think to do best, if they go farthest from the superstition formerly received: therefore care would be had, that, as it fareth in ill purgings, the good be not taken away with the bad, which commonly is done when the people is the reformer.

XVIII. OF TRAVEL.

Travel in the younger sort is a part of education; in the elder a part of experience. He that travelleth into a country before he hath some entrance into the language, goeth to school, and not to travel. That young men travel under some tutor or grave servant, I allow well; so that he be such a one that hath the language, and hath been in the country before; whereby he may be able to tell them what things are worthy to be seen in the country where they go, what acquaintances they are to seek, what exercises or discipline the place yieldeth. For else young men shall go hooded, and look abroad little. It is a strange thing, that in sea-voyages, where there is nothing to be seen but sky and sea, men

should make diaries; but in land-travel, wherein so much is to be observed, for the most part they omit it; as if chance were fitter to be registered than observation. Let diaries therefore be brought in use. The things to be seen and observed are: the courts of princes, especially when they give audience to ambassadors: the courts of justice, while they sit and hear causes: and so of consistories ecclesiastic: the churches and monasteries, with the monuments which are therein extant: the walls and fortifications of cities and towns, and so the havens and harbours: antiquities and ruins; libraries, colleges, disputations, and lectures, where any are; shipping and navies; houses, and gardens of state and pleasure near great cities; armories, arsenals, magazines, exchanges, burses, warehouses; exercises of horsemanship, fencing, training of soldiers and the like; comedies, such whereunto the better sort of persons do resort; treasuries of jewels and robes, cabinets and rarities: and to conclude, whatsoever is memorable in the places where they go. After all which, the tutors or servants ought to make diligent inquiry. As for triumphs, masks, feasts, weddings, funerals, capital executions, and such shews, men need not so be put in mind of them; yet they are not to be neglected. If you will have a young man to put his travel into a little room, and in short time to gather much, this you must do; first, as was said, he must have some entrance into the language before he goeth. Then he must have such a servant, or tutor, as knoweth the country, as was likewise said. Let him carry with him also some card or book describing the country where he travelleth, which will be a good key to his inquiry. Let him keep also a diary. Let him not stay long in one city or town; more or less as the place deserveth, but not long: nay, when he stayeth in one city or town, let him change his lodging from one end and part of the town to another, which is a great adamant of acquaintance. Let him sequester himself from the company of his countrymen, and diet in such places where there is good company of the nation where he travelleth. Let him, upon his removes from one place to another, procure recommendation to some person of quality residing in

the place whither he removeth; that he may use his favour in those things he desireth to see or know. Thus he may abridge his travel with much profit. As for the acquaintance which is to be sought in travel, that which is most of all profitable, is acquaintance with the secretaries and employed men of ambassadors; for so in travelling in one country, he shall suck the experience of many. Let him also see and visit eminent persons in all kinds, which are of great name abroad; that he may be able to tell how the life agreeth with the fame. For quarrels they are with care and discretion to be avoided: they are commonly for mistresses, healths, place, and words. And let a man beware how he keepeth company with choleric and quarrelsome persons; for they will engage him into their own quarrels. When a traveller returneth home, let him not leave the countries where he hath travelled altogether behind him; but maintain a correspondence by letters with those of his acquaintance which are of most worth. And let his travel appear rather in his discourse than in his apparel or gesture; and in his discourse, let him be rather advised in his answers than forward to tell stories: and let it appear that he doth not change his country manners for those of foreign parts; but only prick in some flowers of that he hath learned abroad, into the customs of his own country.

XIX. OF EMPIRE.

It is a miserable state of mind to have few things to desire, and many things to fear: and yet that commonly is the case of kings, who being at the highest, want matter of desire, which makes their minds more languishing: and have many representations of perils and shadows, which makes their minds the less clear. And this is one reason also of that effect which the Scripture speaketh of, "that the king's heart is inscrutable." For multitude of jealousies, and lack of some predominant desire, that should marshal and put in order all the rest, maketh any man's heart hard to find or sound. Hence it comes likewise, that princes many times make themselves desires, and set their hearts upon toys; sometimes

upon a building; sometimes upon erecting of an order; sometimes upon the advancing of a person; sometimes upon obtaining excellency in some art, or feat of the hand; as Nero for playing on the harp; Domitian for certainty of the hand with the arrow; Commodus for playing at fence; Caracalla for driving chariots; and the like. This seemeth incredible unto those that know not the principle, That the mind of man is more cheered and refreshed by profiting in small things, than by standing at a stay in great. We see also, that kings that have been fortunate conquerors in their first years, it being not possible for them to go forward infinitely, but that they must have some check or arrest in their fortunes, turn in their latter years to be superstitious and melancholy: as did Alexander the Great, Dioclesian, and in our memory Charles the Fifth, and others; for he that is used to go forward, and findeth a stop, falleth out of his own favour, and is not the thing he was.

To speak now of the true temper of empire: it is a thing rare and hard to keep; for both temper and distemper consist of contraries. But it is one thing to mingle contraries, another to interchange them. The answer of Apollonius to Vespasian is full of excellent instruction: Vespasian asked him, what was Nero's overthrow? He answered, Nero could touch and tune the harp well, but in government sometimes he used to wind the pins too high, sometimes to let them down too low. And certain it is, that nothing destroyeth authority so much as the unequal and untimely interchange of power pressed too far, and relaxed too much.

This is true, that the wisdom of all these latter times, in princes affairs, is rather fine deliveries, and shiftings of dangers and mischiefs, when they are near; than solid and grounded courses to keep them aloof. But this is but to try masteries with fortune: and let men beware how they neglect and suffer matter of trouble to be prepared; for no man can forbid the spark, nor tell whence it may come. The difficulties in princes business are many and great; but the greatest difficulty is often in their own mind. For it is common with princes, saith Tacitus, to will contradictories. "Sunt

plerumque regum voluntates vehementes, et inter se contrariæ." For it is the solecism of power, to think to command the end, and yet not to endure the mean.

Kings have to deal with their neighbours; their wives; their children; their prelates or clergy; their nobles; their second nobles or gentlemen; their merchants; their commons; and their men of war; and from all these arise dangers, if care and circumspection be not used.

First for their neighbours, there can no general rule be given, the occasions are so variable, save one, which ever holdeth; which is, that princes do keep due sentinel, that none of their neighbours do overgrow so, by increase of territory, by embracing of trade, by approaches, or the like, as they become more able to annoy them, than they were. And this is generally the work of standing counsels, to foresee and to hinder it. During that triumvirate of kings, King Henry the Eighth, of England; Francis the First, king of France; and Charles the Fifth, emperor, there was such a watch kept, that none of the three could win a palm of ground, but the other two would straightways balance it, either by confederation, or if need were by a war: and would not in any wise take up peace at interest. And the like was done by that league, which, Guicciardine saith, was the security of Italy, made between Ferdinando, king of Naples; Lorenzius Medices, and Ludovicus Sforza, potentates, the one of Florence, the other of Milan. Neither is the opinion of some of the schoolmen to be received, that a war cannot justly be made but upon a precedent injury, or provocation. For there is no question but a just fear of an imminent danger, though there be no blow given, is a lawful cause of a war.

For their wives, there are cruel examples of them. Livia is infamed for the poisoning of her husband; Roxolana, Solyman's wife, was the destruction of that renowned prince, Sultan Mustapha; and otherwise troubled his house and succession: Edward the second of England his queen had the principal hand in the deposing and murder of her husband. This kind of

danger is then to be feared, chiefly, when the wives have plots for the raising their own children, or else that they be advowtresses.

For their children: the tragedies likewise of the dangers from them have been many: and generally, the entering of the fathers into suspicion of their children hath been ever unfortunate. The destruction of Mustapha, that we named before, was so fatal to Solyman's line, as the succession of the Turks, from Solyman until this day, is suspected to be untrue, and of strange blood; for that Selymus the second was thought to be supposititious. The destruction of Crispus, a young prince of rare towardness, by Constantins the Great, his father, was in like manner fatal to his house; for both Constantinus and Constans, his sons, died violent deaths; and Constantinus his other son did little better; who died indeed of sickness, but after that Julianus had taken arms against him. The destruction of Demetrius, son to Philip the second of Macedon, turned upon the father, who died of repentance. And many like examples there are; but few or none where the fathers had good by such distrust, except it were where the sons were up in open arms against them; as was Selymus the first against Bajazet: and the three sons of Henry the Second, king of England.

For their prelates, when they are proud and great, there is also danger from them: as it was in the times of Anselmus and Thomas Becket, archbishops of Canterbury, who with their crosiers did almost try it with the king's sword; and yet they had to deal with stout and haughty kings, William Rufus, Henry the first, and Henry the second. The danger is not from that state, but where it hath a dependence of foreign authority; or where the churchmen come in, and are elected, not by the collation of the king or particular patrons, but by the people.

For their nobles; to keep them at a distance it is not amiss; but to depress them, may make a king more absolute, but less safe; and less able to perform any thing that he desires. I have noted it in my "History of king Henry the seventh of England," who depressed

his nobility; whereupon it came to pass that his times were full of difficulties and troubles: for the nobility, though they continued loyal unto him, yet did they not co-operate with him in his business. So that in effect he was fain to do all things himself.

For their second nobles; there is not much danger from them, being a body dispersed. They may sometimes discourse high, but that doth little hurt: besides, they are a counterpoise to the higher nobility, that they grow not too potent: and lastly, being the most immediate in authority with the common people, they do best temper popular commotions.

For their merchants, they are *vena porta;* and if they flourish not, a kingdom may have good limbs, but will have empty veins, and nourish little. Taxes and imposts upon them do seldom good to the king's revenue, for that that he wins in the hundred, he loseth in the shire; the particular rates being increased, but the total bulk of trading rather decreased.

For their commons, there is little danger from them, except it be where they have great and potent heads; or where you meddle with the point of religion, or their customs, or means of life.

For their men of war, it is a dangerous state where they live and remain in a body, and are used to donatives, whereof we see examples in the janizaries, and pretorian bands of Rome; but trainings of men, and arming them in several places, and under several commanders, and without donatives, are things of defence and no danger.

Princes are like to heavenly bodies, which cause good or evil times; and which have much veneration, but no rest. All precepts concerning kings are in effect comprehended in those two remembrances: "Memento quod es homo;" and "Memento quod es Deus," or "vice Dei:" the one bridleth their power, and the other their will.

XX. OF COUNSEL.

The greatest trust between man and man is the trust of giving counsel. For in other confidences, men com-

mit the parts of life; their lands, their goods, their children, their credit, some particular affair; but to such as they make their counsellors, they commit the whole: by how much the more they are obliged to all faith and integrity. The wisest princes need not think it any diminution to their greatness, or derogation to their sufficiency, to rely upon counsel. God himself is not without: but hath made it one of the great names of his blessed Son, "the Counsellor." Solomon hath pronounced, that "in counsel is stability." Things will have their first or second agitation; if they be not tossed upon the arguments of counsel, they will be tossed upon the waves of fortune; and be full of inconstancy, doing and undoing, like the reeling of a drunken man. Solomon's son found the force of counsel, as his father saw the necessity of it. For the beloved kingdom of God was first rent and broken by ill counsel; upon which counsel there are set, for our instruction, the two marks whereby bad counsel is for ever best discerned: that it was young counsel, for the persons; and violent counsel, for the matter.

The ancient times do set forth in figure both the incorporation and inseparable conjunction of counsel with kings, and the wise and politic use of counsel by kings: the one, in that they say Jupiter did marry Metis, which signifieth counsel; whereby they intend, that sovereignty is married to counsel: the other in that which followeth, which was thus: they say, after Jupiter was married to Metis, she conceived by him, and was with child, but Jupiter suffered her not to stay till she brought forth, but eat her up; whereby he became himself with child, and was delivered of Pallas armed out of his head. Which monstrous fable containeth a secret of empire; how kings are to make use of their council of state: that, first, they ought to refer matters unto them, which is the first begetting or impregnation; but when they are elaborate, moulded and shaped in the womb of their council, and grow ripe and ready to be brought forth, that then they suffer not their council to go through with the resolution and direction, as if it depended on them; but take the matter back into their

own hands, and make it appear to the world, that the decrees and final directions, which, because they come forth with prudence and power, are resembled to Pallas armed, proceeded from themselves, and not only from their authority, but, the more to add reputation to themselves, from their head and device.

Let us now speak of the inconveniencies of counsel, and of the remedies. The inconveniencies that have been noted in calling and using counsel are three. First, the revealing of affairs, whereby they become less secret. Secondly, the weakening of the authority of princes, as if they were less of themselves. Thirdly, the danger of being unfaithfully counselled, and more for the good of them that counsel, than of him that is counselled. For which inconveniences the doctrine of Italy, and practice of France, in some kings times, hath introduced cabinet counsels: a remedy worse than the disease.

As to secrecy, princes are not bound to communicate all matters with all counsellors, but may extract and select. Neither is it necessary, that he that consulteth what he should do, should declare what he will do. But let princes beware, that the unsecreting of their affairs comes not from themselves. And as for cabinet counsels, it may be their motto; "Plenus rimarum sum:" one futile person, that maketh it his glory to tell, will do more hurt than many that know it their duty to conceal. It is true, there be some affairs which require extreme secrecy, which will hardly go beyond one or two persons besides the king: neither are those counsels unprosperous; for besides the secrecy, they commonly go on constantly in one spirit of direction without distraction. But then it must be a prudent king, such as is able to grind with a hand-mill; and those inward counsellors had need also be wise men, and especially true and trusty to the king's ends; as it was with king Henry the seventh of England, who in his greatest business imparted himself to none, except it were to Morton and Fox.

For weakening of authority; the fable sheweth the remedy. Nay, the majesty of kings is rather exalted than diminished, when they are in the chair of counsel;

neither was there ever prince bereaved of his dependencies by his council, except where there hath been either an over-greatness in one counsellor, or an over-strict combination in divers; which are things soon found and holpen.

For the last inconvenience, that men will counsel with an eye to themselves; certainly "Non inveniet fidem super terram" is meant of the nature of times, and not of all particular persons. There be that are in nature faithful and sincere, and plain and direct; not crafty and involved: let princes above all draw to themselves such natures. Besides, counsellors are not commonly so united, but that one counsellor keepeth centinel over another; so that if any do counsel out of faction or private ends, it commonly comes to the king's ear. But the best remedy is, if princes know their counsellors, as well as their counsellors know them:

Principis est virtus maxima nosse suos.

And on the other side, counsellors should not be too speculative into their sovereign's person. The true composition of a counsellor is rather to be skilful in their master's business, than in his nature; for then he is like to advise him, and not to feed his humour. It is of singular use to princes, if they take the opinions of their council both separately and together: for private opinion is more free, but opinion before others is more reverend. In private, men are more bold in their own humours; and in consort, men are more obnoxious to others humours; therefore it is good to take both: and of the inferior sort, rather in private, to preserve freedom; of the greater, rather in consort, to preserve respect. It is in vain for princes to take counsel concerning matters, if they take no counsel likewise concerning persons: for all matters are as dead images; and the life of the execution of affairs resteth in the good choice of persons. Neither is it enough to consult concerning persons secundum genera, as in an idea or mathematical description, what the kind and character of the person should be; for the greatest errors are committed, and the most judgment is shewn, in the choice

of individuals. It was truly said, " optimi consiliarii mortui ;" books will speak plain, when counsellors blanch. Therefore it is good to be conversant in them, specially the books of such as themselves have been actors upon the stage.

The councils at this day, in most places, are but familiar meetings; where matters are rather talked on, than debated: and they run too swift to the order or act of council. It were better, that in causes of weight the matter were propounded one day, and not spoken to till the next day; " in nocte consilium." So was it done in the commission of union between England and Scotland; which was a grave and orderly assembly. I commend set days for petitions: for both it gives the suitors more certainty for their attendance; and it frees the meetings for matters of estate, that they may hoc agere. In choice of committees, for ripening business for the council, it is better to choose indifferent persons, than to make an indifferency by putting in those that are strong on both sides. I commend also standing commissions; as for trade, for treasure, for war, for suits, for some provinces; for where there be divers particular councils, and but one council of estate, as it is in Spain, they are, in effect, no more than standing commissions; save that they have greater authority. Let such as are to inform councils out of their particular professions, as lawyers, seamen, mint-men, and the like, be first heard before committees; and then, as occasion serves, before the council. And let them not come in multitudes, or in a tribunitious manner; for that is to clamour councils, not to inform them. A long table, and a square table, or seats about the walls, seem things of form, but are things of substance; for at a long table, a few at the upper end, in effect, sway all the business; but in the other form, there is more use of the counsellors opinions that sit lower. A king when he presides in council, let him beware how he opens his own inclination too much in that which he propoundeth: for else counsellors will but take the wind of him, and instead of giving free counsel sing him a song of Placebo.

XXI. OF DELAYS.

Fortune is like the market, where many times if you can stay a little, the price will fall. And again, it is sometimes like Sibylla's offer, which at first offereth the commodity at full, then consumeth part and part, and still holdeth up the price. For occasion, as it is in the common verse, turneth a bald noddle, after she hath presented her locks in front, and no hold taken: or at least turneth the handle of the bottle first to be received, and after the belly, which is hard to clasp. There is surely no greater wisdom, than well to time the beginnings and onsets of things. Dangers are no more light, if they once seem light: and more dangers have deceived men, than forced them. Nay, it were better to meet some dangers half way, though they come nothing near, than to keep too long a watch upon their approaches; for if a man watch too long, it is odds he will fall asleep. On the other side, to be deceived with too long shadows, as some have been when the moon was low, and shone on their enemies back, and so to shoot off before the time; or to teach dangers to come on, by over-early buckling towards them, is another extreme. The ripeness or unripeness of the occasion, as we said, must ever be well weighed; and generally it is good to commit the beginnings of all great actions to Argus with his hundred eyes, and the ends to Briareus with his hundred hands; first to watch, and then to speed. For the helmet of Pluto, which maketh the politic man go invisible, is secrecy in the counsel, and celerity in the execution. For when things are once come to the execution, there is no secrecy comparable to celerity; like the motion of a bullet in the air, which flieth so swift as it outruns the eye.

XXII. OF CUNNING.

We take cunning for a sinister or crooked wisdom. And certainly there is great difference between a cunning man and a wise man; not only in point of honesty, but in point of ability. There be that can pack the cards, and yet cannot play well; so there are some that

are good in canvasses and factions, that are otherwise weak men. Again, it is one thing to understand persons, and another thing to understand matters; for many are perfect in mens humours, that are not greatly capable of the real part of business; which is the constitution of one that hath studied men more than books. Such men are fitter for practice than for counsel; and they are good but in their own alley: turn them to new men, and they have lost their aim: so as the old rule to know a fool from a wise man, "Mitte ambos nudos ad ignotos, et videbis," doth scarce hold for them. And because these cunning men are like haberdashers of small wares, it is not amiss to set forth their shop.

It is a point of cunning, to wait upon him with whom you speak with your eye; as the Jesuits give it in precept; for there be many wise men that have secret hearts and transparent countenances. Yet this would be done with a demure abasing of your eye sometimes, as the Jesuits also do use.

Another is, that when you have any thing to obtain of present dispatch, you entertain and amuse the party with whom you deal with some other discourse; that he be not too much awake to make objections. I knew a counsellor and secretary, that never came to queen Elizabeth of England with bills to sign, but he would always first put her into some discourse of estate, that she might the less mind the bills.

The like surprise may be made by moving things when the party is in haste, and cannot stay to consider advisedly of that is moved.

If a man would cross a business, that he doubts some other would handsomely and effectually move, let him pretend to wish it well, and move it himself in such sort as may foil it.

The breaking off in the midst of that one was about to say, as if he took himself up, breeds a greater appetite in him with whom you confer, to know more.

And because it works better when any thing seemeth to be gotten from you by question, than if you offer it of yourself, you may lay a bait for a question, by shewing another visage and countenance than you are wont;

to the end to give occasion for the party to ask what the matter is of the change; as Nehemiah did, "And I had not before that time been sad before the king."

In things that are tender and unpleasing, it is good to break the ice by some whose words are of less weight, and to reserve the more weighty voice to come in as by chance, so that he may be asked the question upon the other's speech; as Narcissus did, in relating to Claudius the marriage of Messalina and Silius.

In things that a man would not be seen in himself, it is a point of cunning to borrow the name of the world; as to say, The world says, or, There is a speech abroad.

I knew one, that when he wrote a letter, he would put that which was most material in the postscript, as if it had been a bye-matter.

I knew another that, when he came to have speech, he would pass over that that he intended most; and go forth, and come back again, and speak of it as of a thing that he had almost forgot.

Some procure themselves to be surprised at such times, as it is like the party that they work upon will suddenly come upon them; and to be found with a letter in their hand, or doing somewhat which they are not accustomed; to the end they may be apposed of those things, which of themselves they are desirous to utter.

It is a point of cunning to let fall those words in a man's own name, which he would have another man learn and use, and thereupon take advantage. I knew two that were competitors for the secretary's place in queen Elizabeth's time, and yet kept good quarter between themselves, and would confer one with another upon the business; and the one of them said, that to be a secretary in the declination of a monarchy was a ticklish thing, and that he did not affect it: the other straight caught up those words, and discoursed with divers of his friends, that he had no reason to desire to be secretary in the declination of a monarchy. The first man took hold of it, and found means it was told the queen; who hearing of a declination of a monarchy, took it so ill, as she would never after hear of the other's suit.

There is a cunning which we in England call, the

turning of the cat in the pan; which is, when that which a man says to another, he lays it as if another had said it to him; and to say truth, it is not easy, when such a matter passed between two, to make it appear from which of them it first moved and began.

It is a way that some men have, to glance and dart at others, by justifying themselves by negatives; as to say, This I do not: as Tigellinus did towards Burrhus, "se non diversas spes, sed incolumitatem imperatoris simpliciter spectare."

Some have in readiness so many tales and stories, as there is nothing they would insinuate, but they can wrap it into a tale; which serveth both to keep themselves more in guard, and to make others carry it with more pleasure.

It is a good point of cunning, for a man to shape the answer he would have in his own words and propositions; for it makes the other party stick the less.

It is strange how long some men will lie in wait to speak somewhat they desire to say; and how far about they will fetch, and how many other matters they will beat over to come near it; it is a thing of great patience, but yet of much use.

A sudden, bold, and unexpected question, doth many times surprise a man, and lay him open. Like to him, that having changed his name, and walking in Paul's, another suddenly came behind him, and called him by his true name, whereat straightways he looked back.

But these small wares and petty points of cunning are infinite, and it were a good deed to make a list of them; for that nothing doth more hurt in a state, than that cunning men pass for wise.

But certainly some there are that know the resorts and falls of business, that cannot sink into the main of it; like a house that hath convenient stairs and entries, but never a fair room. Therefore you shall see them find out pretty looses in the conclusion, but are no ways able to examine or debate matters. And yet commonly they take advantage of their inability, and would be thought wits of direction. Some build rather upon the abusing of others, and, as we now say, putting tricks upon them,

than upon soundness of their own proceedings. But Solomon saith, "Prudens advertit ad gressus suos: stultus divertit ad dolos."

XXIII. OF WISDOM FOR A MAN'S SELF.

An ant is a wise creature for itself: but it is a shrewd thing in an orchard or garden. And certainly men that are great lovers of themselves waste the public. Divide with reason between self-love and society; and be so true to thyself, as thou be not false to others; especially to thy king and country. It is a poor centre of a man's actions, Himself. It is right earth. For that only stands fast upon his own centre: whereas all things that have affinity with the heavens, move upon the centre of another which they benefit. The referring of all to a man's self is more tolerable in a sovereign prince, because themselves are not only themselves, but their good and evil is at the peril of the public fortune. But it is a desperate evil in a servant to a prince, or a citizen in a republic. For whatsoever affairs pass such a man's hands, he crooketh them to his own ends: which must needs be often eccentric to the ends of his master or state. Therefore let princes or states choose such servants as have not this mark; except they mean their service should be made but the accessary. That which maketh the effect more pernicious is, that all proportion is lost: it were disproportion enough for the servant's good to be preferred before the master's; but yet it is a greater extreme, when a little good of the servant shall carry things against a great good of the master's. And yet that is the case of bad officers, treasurers, ambassadors, generals, and other false and corrupt servants; which set a bias upon their bowl of their own petty ends and envies, to the overthrow of their masters great and important affairs. And for the most part, the good such servants receive, is after the model of their own fortune; but the hurt they sell for that good, is after the model of their masters fortune. And certainly it is the nature of extreme self-lovers, as they will set an house on fire, and it were but to roast their eggs: and yet these men many times hold credit with their masters, because their study is but to

please them, and profit themselves: and for either respect they will abandon the good of their affairs.

Wisdom for a man's self is in many branches thereof a depraved thing. It is the wisdom of rats, that will be sure to leave a house somewhat before it fall. It is the wisdom of the fox, that thrusts out the badger, who digged and made room for him. It is the wisdom of crocodiles, that shed tears when they would devour. But that which is specially to be noted is, that those which, as Cicero says of Pompey, are "sui amantes sine rivali," are many times unfortunate. And whereas they have all their time sacrificed to themselves, they become in the end themselves sacrifices to the inconstancy of fortune, whose wings they thought by their self-wisdom to have pinioned.

XXIV. OF INNOVATIONS.

As the births of living creatures at first are ill shapen; so are all innovations, which are the births of time. Yet notwithstanding as those that first bring honour into their family, are commonly more worthy than most that succeed: so the first precedent, if it be good, is seldom attained by imitation. For ill, to man's nature, as it stands perverted, hath a natural motion strongest in continuance: but good, as a forced motion, strongest at first. Surely every medicine is an innovation, and he that will not apply new remedies, must expect new evils; for time is the greatest innovator: and if time of course alter things to the worse, and wisdom and counsel shall not alter them to the better, what shall be the end? It is true, that what is settled by custom, though it be not good, yet at least it is fit. And those things which have long gone together, are, as it were, confederate within themselves: whereas new things piece not so well; but though they help by their utility, yet they trouble by their inconformity. Besides, they are like strangers, more admired, and less favoured. All this is true if time stood still; which contrariwise moveth so round, that a froward retention of custom is as turbulent a thing as an innovation; and they that reverence too much old times are but a scorn to the new. It were good, therefore, that

men in their innovations would follow the example of time itself, which indeed innovateth greatly, but quietly and by degrees scarce to be perceived: for otherwise, whatsoever is new is unlooked for; and ever it mends some, and impairs others: and he that is holpen takes it for a fortune, and thanks the time; and he that is hurt, for a wrong, and imputeth it to the author. It is good also not to try experiments in states, except the necessity be urgent, or the utility evident; and well to beware that it be the reformation that draweth on the change; and not the desire of change that pretendeth the reformation. And lastly, that the novelty, though it be not rejected, yet be held for a suspect: and, as the Scripture saith, "that we make a stand upon the ancient way, and then look about us, and discover what is the straight and right way, and so to walk in it."

XXV. OF DISPATCH.

Affected dispatch is one of the most dangerous things to business that can be. It is like that which the physicians call predigestion, or hasty digestion, which is sure to fill the body full of crudities and secret seeds of diseases. Therefore measure not dispatch by the times of sitting, but by the advancement of the business. And as in races, it is not the large stride, or high lift, that makes the speed; so in business, the keeping close to the matter, and not taking of it too much at once, procureth dispatch. It is the care of some, only to come off speedily for the time; or to contrive some false periods of business, because they may seem men of dispatch. But it is one thing to abbreviate by contracting, another by cutting off: and business so handled at several sittings or meetings, goeth commonly backward and forward in an unsteady manner. I know a wise man that had it for a by-word, when he saw men hasten to a conclusion, "Stay a little, that we may make an end the sooner."

On the other side, true dispatch is a rich thing. For time is the measure of business, as money is of wares; and business is bought at a dear hand, where there is small dispatch. The Spartans and Spaniards have been noted to be of small dispatch: "Mi venga la muerte de

Spagna; " Let my death come from Spain; for then it will be sure to be long in coming.

Give good hearing to those that give the first information in business; and rather direct them in the beginning, than interrupt them in the continuance of their speeches: for he that is put out of his own order, will go forward and backward, and be more tedious while he waits upon his memory, than he could have been if he had gone on in his own course. But sometimes it is seen, that the moderator is more troublesome than the actor.

Iterations are commonly loss of time: but there is no such gain of time, as to iterate often the state of the question; for it chaseth away many a frivolous speech as it is coming forth. Long and curious speeches are as fit for dispatch, as a robe or mantle with a long train is for race. Prefaces, and passages, and excusations, and other speeches of reference to the person, are great wastes of time; and though they seem to proceed of modesty, they are bravery. Yet beware of being too material, when there is any impediment or obstruction in mens wills; for pre-occupation of mind ever requireth preface of speech; like a fomentation to make the unguent enter.

Above all things, order, and distribution, and singling out of parts, is the life of dispatch: so as the distribution be not too subtile: for he that doth not divide, will never enter well into business: and he that divideth too much, will never come out of it clearly. To choose time, is to save time; and an unseasonable motion is but beating the air. There be three parts of business; the preparation, the debate or examination, and the perfection. Whereof, if you look for dispatch, let the middle only be the work of many, and the first and last the work of few. The proceeding upon somewhat conceived in writing, doth for the most part facilitate dispatch: for though it should be wholly rejected, yet that negative is more pregnant of direction than an indefinite; as ashes are more generative than dust.

XXVI. OF SEEMING WISE.

It hath been an opinion, that the French are wiser than they seem, and the Spaniards seem wiser than they are. But howsoever it be between nations, certainly it is so between man and man. For as the apostle saith of godliness, "having a shew of godliness, but denying the power thereof;" so certainly there are in point of wisdom and sufficiency that do nothing or little very solemnly; "magno conatu nugas." It is a ridiculous thing, and fit for a satire to persons of judgment, to see what shifts these formalists have, and what prospectives to make superficies to seem body that hath depth and bulk. Some are so close and reserved, as they will not shew their wares but by a dark light; and seem always to keep back somewhat; and when they know within themselves, they speak of that they do not well know, would nevertheless seem to others to know of that which they may not well speak. Some help themselves with countenance and gesture, and are wise by signs; as Cicero saith of Piso, that when he answered him, he fetched one of his brows up to his forehead, and bent the other down to his chin: "respondes, altero ad frontem sublato, altero ad mentum depresso supercilio, crudelitatem tibi non placere." Some think to bear it by speaking a great word, and being peremptory; and go on, and take by admittance that which they cannot make good. Some, whatsoever is beyond their reach, will seem to despise or make light of it as impertinent or curious; and so would have their ignorance seem judgment. Some are never without a difference, and commonly, by amusing men with a subtilty, blanch the matter; of whom A. Gellius saith, "hominem delirum, qui verborum minutiis rerum frangit pondera." Of which kind also, Plato in his "Protagoras" bringeth in Prodicus in scorn, and maketh him make a speech that consisteth of distinctions from the beginning to the end. Generally such men in all deliberations find ease to be of the negative side, and affect a credit to object and foretel difficulties: for when propositions are denied, there is an end of them; but if

they be allowed, it requireth a new work: which false point of wisdom is the bane of business. To conclude, there is no decaying merchant, or inward beggar, hath so many tricks to uphold the credit of their wealth, as these empty persons have to maintain the credit of their sufficiency. Seeming wise men may make shift to get opinion; but let no man choose them for employment, for certainly you were better take for business a man somewhat absurd, than over formal.

XXVII. OF FRIENDSHIP.

It had been hard for him that spake it to have put more truth and untruth together, in few words, than in that speech; "Whosoever is delighted in solitude, is either a wild beast, or a God." For it is most true, that a natural and secret hatred, and aversation towards society, in any man, hath somewhat of the savage beast: but it is most untrue, that it should have any character at all of the divine nature, except it proceed, not out of a pleasure in solitude, but out of a love and desire to sequester a man's self for a higher conversation: such as is found to have been falsely and feignedly in some of the heathen; as Epimenides the Candian, Numa the Roman, Empedocles the Sicilian, and Apollonius of Tyana; and truly and really in divers of the ancient hermits, and holy fathers of the Church. But little do men perceive what solitude is, and how far it extendeth. For a crowd is not company, and faces are but a gallery of pictures; and talk but a tinkling cymbal, where there is no love. The Latin adage meeteth with it a little; "Magna civitas, magna solitudo;" because in a great town friends are scattered, so that there is not that fellowship, for the most part, which is in less neighbourhoods. But we may go farther, and affirm most truly, that it is a mere and miserable solitude, to want true friends, without which the world is but a wilderness. And even in this sense also of solitude, whosoever in the frame of his nature and affections is unfit for friendship, he taketh it of the beast, and not from humanity.

A principal fruit of friendship is the ease and discharge of the fulness and swellings of the heart, which passions of all kinds do cause and induce. We know diseases of stoppings and suffocations are the most dangerous in the body; and it is not much otherwise in the mind; you may take sarza to open the liver; steel to open the spleen; flour of sulphur for the lungs; castoreum for the brain; but no receipt openeth the heart but a true friend, to whom you may impart griefs, joys, fears, hopes, suspicions, counsels, and whatsoever lieth upon the heart, to oppress it, in a kind of civil shrift or confession.

It is a strange thing to observe, how high a rate great kings and monarchs do set upon this fruit of friendship, whereof we speak; so great, as they purchase it many times at the hazard of their own safety and greatness. For princes, in regard of the distance of their fortune from that of their subjects and servants, cannot gather this fruit, except, to make themselves capable thereof, they raise some persons to be as it were companions, and almost equals to themselves; which many times sorteth to inconvenience. The modern languages give unto such persons the name of favourites or privadoes; as if it were matter of grace or conversation: but the Roman name attaineth the true use and cause thereof; naming them "participes curarum;" for it is that which tieth the knot. And we see plainly, that this hath been done, not by weak and passionate princes only, but by the wisest and most politic that ever reigned, who have oftentimes joined to themselves some of their servants, whom both themselves have called friends, and allowed others likewise to call them in the same manner, using the word which is received between private men.

L. Sylla, when he commanded Rome, raised Pompey, after surnamed the Great, to that height, that Pompey vaunted himself for Sylla's over-match. For when he had carried the consulship for a friend of his against the pursuit of Sylla, and that Sylla did a little resent thereat, and began to speak great, Pompey turned upon him again, and in effect bade him be quiet; for that more men adored the sun rising, than the sun setting. With Julius Cæsar Decimus Brutus had obtained that

interest, as he set him down in his testament for heir in remainder after his nephew. And this was the man that had power with him to draw him forth to his death. For when Cæsar would have discharged the senate, in regard of some ill presages, and especially a dream of Calpurnia; this man lifted him gently by the arm out of his chair, telling him, He hoped he would not dismiss the senate, till his wife had dreamed a better dream. And it seemeth, his favour was so great, as Antonius, in a letter which is recited verbatim in one of Cicero's Philippics, calleth him "venefica," witch; as if he had enchanted Cæsar. Augustus raised Agrippa, though of mean birth, to that height, as when he consulted with Mæcenas about the marriage of his daughter Julia, Mæcenas took the liberty to tell him, That he must either marry his daughter to Agrippa, or take away his life; there was no third way, he had made him so great. With Tiberius Cæsar Sejanus had ascended to that height, as they two were termed and reckoned as a pair of friends. Tiberius in a letter to him saith; "Hæc pro amicitia nostra non occultavi:" and the whole senate dedicated an altar to friendship as to a goddess, in respect of the great dearness of friendship between them two. The like or more was between Septimius Severus and Plantianus. For he forced his eldest son to marry the daughter of Plantianus; and would often maintain Plantianus in doing affronts to his son: and did write also in a letter to the senate, by these words: "I love the man so well, as I wish he may over-live me." Now if these princes had been as a Trajan, or a Marcus Aurelius, a man might have thought that this had proceeded of an abundant goodness of nature; but being men so wise, of such strength and severity of mind, and so extreme lovers of themselves, as all these were; it proveth most plainly, that they found their own felicity, though as great as ever happened to mortal men, but as an half piece, except they might have a friend to make it entire; and yet, which is more, they were princes that had wives, sons, nephews; and yet all these could not supply the comfort of friendship.

It is not to be forgotten what Commineus observeth of his first master duke Charles the Hardy, namely, That he would communicate his secrets with none; and least of all those secrets which troubled him most. Whereupon he goeth on, and saith, That towards his latter time, that closeness did impair, and a little perish his understanding. Surely Commineus might have made the same judgment also, if it had pleased him, of his second master Lewis the eleventh, whose closeness was indeed his tormentor. The parable of Pythagoras is dark, but true; "Cor ne edito," eat not the heart. Certainly, if a man would give it a hard phrase, those that want friends to open themselves unto, are cannibals of their own hearts. But one thing is most admirable, wherewith I will conclude this first fruit of friendship, which is, that this communicating of a man's self to his friend works two contrary effects; for it redoubleth joys, and cutteth griefs in halfs. For there is no man that imparteth his joys to his friends, but he joyeth the more; and no man that imparteth his griefs to his friend, but he grieveth the less. So that it is in truth of operation upon a man's mind of like virtue, as the alchemists use to attribute to their stone, for man's body; that it worketh all contrary effects, but still to the good and benefit of nature. But yet, without praying in aid of alchemists, there is a manifest image of this in the ordinary course of nature. For in bodies, union strengtheneth and cherisheth any natural action; and, on the other side, weakeneth and dulleth any violent impression; and even so is it of minds.

The second fruit of friendship is healthful and sovereign for the understanding, as the first is for the affections. For friendship maketh indeed a fair day in the affections, from storm and tempests; but it maketh day-light in the understanding, out of darkness and confusion of thoughts: neither is this to be understood only of faithful counsel, which a man receiveth from his friend; but before you come to that, certain it is, that whosoever hath his mind fraught with many thoughts, his wits and understanding do clarify and break up in the communicating and discoursing with another: he tosseth

his thoughts more easily; he marshalleth them more orderly; he seeth how they look when they are turned into words; finally, he waxeth wiser than himself; and that more by an hour's discourse, than by a day's meditation. It was well said by Themistocles to the king of Persia, That speech was like cloth of Arras, opened and put abroad, whereby the imagery doth appear in figure; whereas in thoughts they lie but as in packs. Neither is this second fruit of friendship, in opening the understanding, restrained only to such friends, as are able to give a man counsel: they indeed are best: but even, without that, a man learneth of himself and bringeth his own thoughts to light, and whetteth his wits as against a stone, which itself cuts not. In a word; a man were better relate himself to a statue or picture, than to suffer his thoughts to pass in smother.

Add now, to make this second fruit of friendship complete, that other point which lieth more open, and falleth within vulgar observation; which is faithful counsel from a friend. Heraclitus saith well in one of his ænigmas, Dry light is ever the best. And certain it is, that the light that a man receiveth by counsel from another, is drier and purer, than that which cometh from his own understanding and judgment; which is ever infused and drenched in his affections and customs. So as there is as much difference between the counsel that a friend giveth, and that a man giveth himself, as there is between the counsel of a friend, and of a flatterer. For there is no such flatterer as is a man's self; and there is no such remedy against flattery of a man's self, as the liberty of a friend. Counsel is of two sorts; the one concerning manners, the other concerning business. For the first, the best preservative to keep the mind in health, is the faithful admonition of a friend. The calling a man's self to a strict account, is a medicine sometimes too piercing and corrosive. Reading good books of morality, is a little flat and dead. Observing our faults in others, is sometimes improper for our case: but the best receipt, best, I say, to work, and best to take, is the admonition of a friend. It is a strange thing to behold what gross errors and extreme

absurdities many, especially of the greater sort, do commit for want of a friend to tell them of them; to the great damage both of their fame and fortune. For, as St. James saith, they are as men "that look sometimes into a glass, and presently forget their own shape and favour." As for business, a man may think if he will, that two eyes see no more than one; or that a gamester seeth always more than a looker-on; or that a man in anger is as wise as he that hath said over the four and twenty letters; or that a musket may be shot off, as well upon the arm, as upon a rest; and such other fond and high imaginations, to think himself all in all. But when all is done, the help of good counsel is that which setteth business straight. And if any man think, that he will take counsel, but it shall be by pieces; asking counsel in one business of one man, and in another business of another man; it is well, that is to say, better perhaps than if he asked none at all, but he runneth two dangers: one, that he shall not be faithfully counselled; for it is a rare thing, except it be from a perfect and entire friend, to have counsel given, but such as shall be bowed and crooked to some ends which he hath that giveth it. The other, that he shall have counsel given, hurtful and unsafe, though with good meaning, and mixed partly of mischief, and partly of remedy: even as if you would call a physician that is thought good for the cure of the disease you complain of, but is unacquainted with your body; and therefore may put you in way for a present cure, but overthroweth your health in some other kind, and so cure the disease and kill the patient. But a friend that is wholly acquainted with a man's estate, will beware by furthering any present business how he dasheth upon other inconvenience. And therefore rest not upon scattered counsels; they will rather distract and mislead, than settle and direct.

After these two noble fruits of friendship, peace in the affections, and support of the judgment, followeth the last fruit, which is like the pomegranate, full of many kernels; I mean aid, and bearing a part in all actions and occasions. Here the best way to represent to life

the manifold use of friendship, is to cast and see how many things there are which a man cannot do himself; and then it will appear that it was a sparing speech of the ancients to say, That a friend is another himself; for that a friend is far more than himself. Men have their time, and die many times in desire of some things which they principally take to heart; the bestowing of a child, the finishing of a work, or the like. If a man have a true friend, he may rest almost secure, that the care of those things will continue after him. So that a man hath as it were two lives in his desires. A man hath a body, and that body is confined to a place; but where friendship is, all offices of life are as it were granted to him and his deputy: for he may exercise them by his friend. How many things are there, which a man cannot, with any face or comeliness, say or do himself? A man can scarce alledge his own merits with modesty, much less extol them: a man cannot sometimes brook to supplicate or beg; and a number of the like. But all these things are graceful in a friend's mouth, which are blushing in a man's own. So again, a man's person hath many proper relations, which he cannot put off. A man cannot speak to his son, but as a father; to his wife, but as a husband; to his enemy, but upon terms; whereas a friend may speak as the case requires, and not as it sorteth with the person. But to enumerate these things were endless; I have given the rule, where a man cannot fitly play his own part; if he have not a friend, he may quit the stage.

XXVIII. OF EXPENCE.

Riches are for spending; and spending for honour and good actions. Therefore extraordinary expence must be limited by the worth of the occasion; for voluntary undoing may be as well for a man's country, as for the kingdom of heaven. But ordinary expence ought to be limited by a man's estate, and governed with such regard as it be within his compass; and not subject to deceit and abuse of servants; and ordered to the best shew, that the bills may be less than the estimation abroad. Certainly if a man will keep but of

even hand, his ordinary expences ought to be but to the half of his receipts; and if he think to wax rich, but to the third part. It is no baseness for the greatest, to descend and look into their own estate. Some forbear it, not upon negligence alone, but doubting to bring themselves into melancholy, in respect they shall find it broken. But wounds cannot be cured without searching. He that cannot look into his own estate at all, had need both choose well those whom he employeth, and change them often: for new are more timorous and less subtile. He that can look into his estate but seldom, it behoveth him to turn all to certainties. A man had need, if he be plentiful in some kind of expence, to be as saving again in some other. As if he be plentiful in diet, to be saving in apparel: if he be plentiful in the hall, to be saving in the stable: and the like. For he that is plentiful in expences of all kinds, will hardly be preserved from decay. In clearing of a man's estate, he may as well hurt himself in being too sudden, as in letting it run on too long: for hasty selling is commonly as disadvantageable as interest. Besides, he that clears at once will relapse; for finding himself out of straits, he will revert to his customs; but he that cleareth by degrees induceth a habit of frugality, and gaineth as well upon his mind as upon his estate. Certainly, who hath a state to repair, may not despise small things: and commonly it is less dishonourable to abridge petty charges, than to stoop to petty gettings. A man ought warily to begin charges, which once begun will continue; but in matters that return not, he may be more magnificent.

XXIX. OF THE TRUE GREATNESS OF KINGDOMS AND ESTATES.

The speech of Themistocles the Athenian, which was haughty and arrogant in taking so much to himself, had been a grave and wise observation and censure, applied at large to others. Desired at a feast to touch a lute, he said, He could not fiddle, but yet he could make a small town a great city. These words, holpen a little with a metaphor, may express two differing

abilities in those that deal in business of estate. For if a true survey be taken of counsellors and statesmen, there may be found, though rarely, those which can make a small state great, and yet cannot fiddle; as on the other side, there will be found a great many that can fiddle very cunningly, but yet are so far from being able to make a small state great, as their gift lieth the other way; to bring a great and flourishing estate to ruin and decay. And certainly those degenerate arts and shifts, whereby many counsellors and governors gain both favour with their masters, and estimation with the vulgar, deserve no better name than fiddling; being things rather pleasing for the time, and graceful to themselves only, than tending to the weal and advancement of the state which they serve. There are also, no doubt, counsellors and governors which may be held sufficient, *negotiis pares*, able to manage affairs, and to keep them from precipices and manifest inconveniencies, which nevertheless are far from the ability to raise and amplify an estate, in power, means, and fortune. But be the workmen what they may be, let us speak of the work; that is, the true greatness of kingdoms and estates, and the means thereof. An argument fit for great and mighty princes to have in their hand; to the end that neither by over-measuring their forces they lose themselves in vain enterprises; nor on the other side, by undervaluing them, they descend to fearful and pusillanimous counsels.

The greatness of an estate in bulk and territory doth fall under measure, and the greatness of finances and revenue doth fall under computation. The population may appear by musters; and the number and greatness of cities and towns by cards and maps. But yet there is not any thing amongst civil affairs more subject to error, than the right valuation and true judgment concerning the power and forces of an estate. The kingdom of heaven is compared, not to any great kernel or nut, but to a grain of mustard-seed; which is one of the least grains, but hath in it a property and spirit hastily to get up and spread. So are there states, great in territory, and yet not apt to enlarge or command;

and some that have but a small dimension of stem, and yet apt to be the foundations of great monarchies.

Walled towns, stored arsenals and armouries, goodly races of horse, chariots of war, elephants, ordnance, artillery, and the like: all this is but a sheep in a lion's skin, except the breed and disposition of the people be stout and warlike. Nay, number itself, in armies, importeth not much, where the people is of weak courage; for, as Virgil saith, it never troubles a wolf how many the sheep be. The army of the Persians, in the plains of Arbela, was such a vast sea of people, as it did somewhat astonish the commanders in Alexander's army; who came to him therefore, and wished him to set upon them by night; but he answered, he would not pilfer the victory: and the defeat was easy. When Tigranes the Armenian, being encamped upon a hill with four hundred thousand men, discovered the army of the Romans, being not above fourteen thousand, marching towards him; he made himself merry with it, and said, "Yonder men are too many for an embassage, and too few for a fight." But before the sun set, he found them enow to give him the chace, with infinite slaughter. Many are the examples of the great odds between number and courage: so that a man may truly make a judgment, that the principal point of greatness in any state is to have a race of military men. Neither is money the sinews of war, as it is trivially said, where the sinews of mens arms, in base and effeminate people, are failing. For Solon said well to Crœsus, when in ostentation he shewed him his gold, "Sir, if any other come that hath better iron than you, he will be master of all this gold." Therefore let any prince or state think soberly of his forces, except his militia of natives be of good and valiant soldiers. And let princes, on the other side, that have subjects of martial disposition, know their own strength, unless they be otherwise wanting unto themselves. As for mercenary forces, which is the help in this case, all examples shew, that whatsoever estate or prince doth rest upon them, he may spread his feathers for a time, but he will mew them soon after.

The blessing of Judah and Issachar will never meet; that the same people or nation should be both the lion's whelp, and the ass between burdens. Neither will it be, that a people over-laid with taxes should ever become valiant and martial. It is true, that taxes levied by consent of the estate, do abate mens courage less; as it hath been seen notably in the excises of the Low Countries; and, in some degree, in the subsidies of England. For you must note, that we speak now of the heart, and not of the purse. So that although the same tribute and tax, laid by consent, or by imposing, be all one to the purse, yet it works diversly upon the courage. So that you may conclude, that no people overcharged with tribute is fit for empire.

Let states that aim at greatness, take heed how their nobility and gentlemen do multiply too fast; for that maketh the common subject grow to be a peasant and base swain, driven out of heart, and in effect but the gentleman's labourer. Even as you may see in coppice woods; if you leave your staddles too thick, you shall never have clean underwood, but shrubs and bushes. So in countries, if the gentlemen be too many, the commons will be base; and you will bring it to that, that not the hundred poll will be fit for an helmet; especially as to the infantry, which is the nerve of an army: and so there will be great population, and little strength. This which I speak of, hath been no where better seen, than by comparing of England and France; whereof England, though far less in territory and population, hath been, nevertheless, an overmatch; in regard the middle people of England make good soldiers, which the peasants of France do not. And herein the device of king Henry the seventh, whereof I have spoken largely in the history of his life, was profound and admirable: in making farms, and houses of husbandry, of a standard; that is, maintained with such a proportion of land unto them, as may breed a subject to live in convenient plenty, and no servile condition; and to keep the plough in the hands of the owners, and not mere hirelings. And thus indeed you shall attain to Virgil's character, which he gives to ancient Italy:

Terra potens armis, atque ubere glebæ.

Neither is that state, which, for any thing I know, is almost peculiar to England, and hardly to be found any where else, except it be perhaps in Poland, to be passed over; I mean the state of free servants, and attendants upon noblemen and gentlemen, which are no ways inferior unto the yeomanry for arms: and therefore out of all question, the splendour and magnificence, and great retinues, and hospitality of noblemen and gentlemen, received into custom, doth much conduce unto martial greatness: whereas, contrariwise, the close and reserved living of noblemen and gentlemen causeth a penury of military forces.

By all means it is to be procured, that the trunk of Nebuchadnezzar's tree of monarchy be great enough to bear the branches and the boughs; that is, that the natural subjects of the crown or state bear a sufficient proportion to the stranger subjects that they govern. Therefore all states, that are liberal of naturalization towards strangers, are fit for empire. For to think that an handful of people can, with the greatest courage and policy in the world, embrace too large extent of dominion, it may hold for a time, but it will fail suddenly. The Spartans were a nice people in point of naturalization; whereby, while they kept their compass, they stood firm; but when they did spread, and their boughs were become too great for their stem, they became a windfal upon the sudden. Never any state was, in this point, so open to receive strangers into their body, as were the Romans; therefore it sorted with them accordingly, for they grew to the greatest monarchy. Their manner was to grant naturalization, which they called "jus civitatis," and to grant it in the highest degree, that is, not only "jus commercii, jus connubii, jus hereditatis;" but also, "jus suffragii," and "jus honorum:" and this not to singular persons alone, but likewise to whole families; yea, to cities, and sometimes to nations. Add to this, their custom of plantation of colonies, whereby the Roman plant was removed into the soil of other nations: and putting both constitutions together, you will say, that it was not the Romans that spread upon the world, but it was the world that spread upon the Romans: and that was the

sure way of greatness. I have marvelled sometimes at Spain, how they clasp and contain so large dominions, with so few natural Spaniards: but sure the whole compass of Spain is a very great body of a tree, far above Rome and Sparta at the first. And besides, though they have not had that usage, to naturalize liberally, yet they have that which is next to it; that is, to employ, almost indifferently, all nations in their militia of ordinary soldiers: yea, and sometimes in their highest commands. Nay, it seemeth at this instant, they are sensible of this want of natives; as by the pragmatical sanction, now published, appeareth.

It is certain, that sedentary and within-door arts, and delicate manufactures, that require rather the finger than the arm, have in their nature a contrariety to a military disposition. And generally all warlike people are a little idle, and love danger better than travail: neither must they be too much broken of it, if they shall be preserved in vigour. Therefore it was great advantage in the ancient states of Sparta, Athens, Rome, and others, that they had the use of slaves, which commonly did rid those manufacturers. But that is abolished, in greatest part, by the Christian law. That which cometh nearest to it, is, to leave those arts chiefly to strangers, which for that purpose are the more easily to be received, and to contain the principal bulk of the vulgar natives within those three kinds; tillers of the ground, free-servants, and handicraftsmen of strong and manly arts, as smiths, masons, carpenters, etc. not reckoning professed soldiers.

But above all, for empire and greatness, it importeth most, that a nation do profess arms as their principal honour, study, and occupation. For the things which we formerly have spoken of, are but habilitations towards arms; and what is habilitation without intention and act? Romulus after his death, as they report or feign, sent a present to the Romans, that above all they should intend arms, and then they should prove the greatest empire of the world. The fabric of the state of Sparta was wholly, though not wisely, framed and composed to that scope and end. The Persians and Macedonians had it for a flash. The Gauls, Germans, Goths, Saxons, Normans,

and others, had it for a time. The Turks have it at this day, though in great declination. Of Christian Europe they that have it, are in effect only the Spaniards. But it is so plain, that every man profiteth in that he most intendeth, that it needeth not to be stood upon. It is enough to point at it; that no nation, which doth not directly profess arms, may look to have greatness fall into their mouths. And on the other side, it is a most certain oracle of time, that those states that continue long in that profession, as the Romans and Turks principally have done, do wonders: and those that have professed arms but for an age, have notwithstanding commonly attained that greatness in that age, which maintained them long after, when their profession and exercise of arms hath grown to decay.

Incident to this point is, for a state to have those laws or customs, which may reach forth unto them just occasions, as may be pretended, of war. For there is that justice imprinted in the nature of men, that they enter not upon wars, whereof so many calamities do ensue, but upon some, at the least specious, grounds and quarrels. The Turk hath at hand, for cause of war, the propagation of his law or sect; a quarrel that he may always command. The Romans, though they esteemed the extending the limits of their empire to be great honour to their generals, when it was done; yet they never rested upon that alone to begin a war. First therefore, let nations that pretend to greatness have this, that they be sensible of wrongs, either upon borderers, merchants, or politic ministers; and that they sit not too long upon a provocation. Secondly, let them be prest, and ready to give aids and succours to their confederates; as it ever was with the Romans: insomuch, as if the confederate had leagues defensive with divers other states, and, upon invasion offered, did implore their aids severally, yet the Romans would ever be the foremost, and leave it to none other to have the honour. As for the wars, which were anciently made on the behalf of a kind of party, or tacit conformity of estate, I do not see how they may be well justified; as when the Romans made a war for the liberty of Græcia; or when the Lacedæ-

monians and Athenians made wars, to set up or pull down democracies and oligarchies; or when wars were made by foreigners, under the pretence of justice or protection, to deliver the subjects of others from tyranny and oppression; and the like. Let it suffice, that no estate expect to be great, that is not awake upon any just occasion of arming.

No body can be healthful without exercise, neither natural body nor politic: and certainly, to a kingdom or estate, a just and honourable war is the true exercise. A civil war, indeed, is like the heat of a fever; but a foreign war is like the heat of exercise, and serveth to keep the body in health. For in a slothful peace, both courages will effeminate, and manners corrupt. But howsoever it be for happiness, without all question, for greatness it maketh, to be still, for the most part, in arms: and the strength of a veteran army, though it be a chargeable business, always on foot, is that which commonly giveth the law, or at least the reputation amongst all neighbour states, as may well be seen in Spain; which hath had, in one part or other, a veteran army, almost continually, now by the space of six-score years.

To be master of the sea, is an abridgment of a monarchy. Cicero writing to Atticus, of Pompey his preparation against Cæsar, saith, "Consilium Pompeii plane Themistocleum est; putat enim, qui mari potitur, eum rerum potiri." And without doubt Pompey had tired out Cæsar, if upon vain confidence he had not left that way. We see the great effects of battles by sea. The battle of Actium decided the empire of the world. The battle of Lepanto arrested the greatness of the Turk. There be many examples, where sea fights have been final to the war; but this is, when princes or states have set up their rest upon the battles. But thus much is certain; that he that commands the sea is at great liberty, and may take as much and as little of the war as he will. Whereas those that be strongest by land are many times, nevertheless, in great straits. Surely, at this day, with us of Europe, the vantage of strength at sea, which is one of the principal dowries of this kingdom of Great Britain, is great: both because most of the kingdoms of

Europe are not merely inland, but girt with the sea, most part of their compass; and because the wealth of both Indies seems in great part but an accessary to the command of the seas.

The wars of latter ages seem to be made in the dark, in respect of the glory and honour which reflected upon men from the wars in ancient time. There be now, for martial encouragement, some degrees and orders of chivalry, which nevertheless are conferred promiscuously upon soldiers and no soldiers: and some remembrance perhaps upon the escutcheon, and some hospitals for maimed soldiers, and such like things. But in ancient times, the trophies erected upon the place of the victory; the funeral laudatives and monuments for those that died in the wars; the crowns and garlands personal; the stile of emperor, which the great kings of the world after borrowed; the triumphs of the generals upon their return; the great donatives and largesses upon the disbanding of the armies, were things able to inflame all mens courages: but above all, that of the triumph, among the Romans, was not pageants or gaudery, but one of the wisest and noblest institutions that ever was. For it contained three things; honour to the general; riches to the treasury out of the spoils; and donatives to the army. But that honour, perhaps, were not fit for monarchies; except it be in the person of the monarch himself, or his sons; as it came to pass in the times of the Roman emperors, who did impropriate the actual triumphs to themselves and their sons, for such wars as they did atchieve in person; and left only, for wars atchieved by subjects, some triumphal garments and ensigns to the general.

To conclude: no man can, by care taking, as the Scripture saith, add a cubit to his stature, in this little model of a man's body: but in the great frame of kingdoms and commonwealths, it is in the power of princes or estates, to add amplitude and greatness to their kingdoms. For by introducing such ordinances, constitutions, and customs, as we have now touched, they may sow greatness to their posterity and succession. But these things are commonly not observed, but left to take their chance.

XXX. OF REGIMENT OF HEALTH.

There is a wisdom in this beyond the rules of physic: a man's own observation, what he finds good of, and what he finds hurt of, is the best physic to preserve health. But it is a safer conclusion to say this, "This agreeth not well with me, therefore I will not continue it;" than this, "I find no offence of this, therefore I may use it." For strength of nature in youth passeth over many excesses, which are owing a man till his age. Discern of the coming on of years, and think not to do the same things still; for age will not be defied. Beware of sudden change in any great point of diet, and if necessity enforce it, fit the rest to it. For it is a secret both in nature and state, that it is safer to change many things than one. Examine thy customs of diet, sleep, exercise, apparel, and the like; and try in any thing thou shalt judge hurtful, to discontinue it by little and little; but so, as if thou dost find any inconvenience by the change, thou come back to it again; for it is hard to distinguish that which is generally held good and wholesome, from that which is good particularly, and fit for thine own body. To be free-minded and cheerfully disposed, at hours of meat, and of sleep, and of exercise, is one of the best precepts of long lasting. As for the passions and studies of the mind, avoid envy, anxious fears, anger, fretting inwards, subtile and knotty inquisitions, joys and exhilarations in excess, sadness not communicated. Entertain hopes, mirth rather than joy, variety of delights rather than surfeit of them; wonder and admiration, and therefore novelties; studies that fill the mind with splendid and illustrious objects, as histories, fables, and contemplations of nature. If you fly physic in health altogether, it will be too strange for your body when you shall need it. If you make it too familiar, it will work no extraordinary effect when sickness cometh. I commend rather some diet for certain seasons, than frequent use of physic, except it be grown into a custom. For those diets alter the body more, and trouble it less. Despise no new accident in your body, but ask opinion of it. In sickness respect health principally: and in health, action. For those that put their bodies to endure in

health, may in most sicknesses, which are not very sharp, be cured only with diet and tendering. Celsus could never have spoken it as a physician, had he not been a wise man withal; when he giveth it for one of the great precepts of health and lasting, that a man do vary and interchange contraries; but with an inclination to the more benign extreme. Use fasting and full eating, but rather full eating; watching and sleep, but rather sleep; sitting and exercise, but rather exercise, and the like. So shall nature be cherished, and yet taught masteries. Physicians are some of them so pleasing and conformable to the humour of the patient, as they press not the true cure of the disease; and some other are so regular in proceeding according to art for the disease, as they respect not sufficiently the condition of the patient. Take one of a middle temper; or if it may not be found in one man, combine two of either sort; and forget not to call as well the best acquainted with your body, as the best reputed of for his faculty.

XXXI. OF SUSPICION.

Suspicions amongst thoughts, are like bats amongst birds, they ever fly by twilight. Certainly they are to be repressed, or at the least well guarded: for they cloud the mind, they lose friends, and they check with business, whereby business cannot go on currently and constantly. They dispose kings to tyranny, husbands to jealousy, wise men to irresolution and melancholy. They are defects not in the heart, but in the brain; for they take place in the stoutest natures; as in the example of Henry the Seventh of England; there was not a more suspicious man, nor a more stout. And in such a composition they do small hurt. For commonly they are not admitted but with examination, whether they be likely or no? But in fearful natures they gain ground too fast. There is nothing makes a man suspect much, more than to know little: and therefore men should remedy suspicion, by procuring to know more, and not to keep their suspicions in smother. What would men have? Do they think those they employ and deal with are saints? Do they not think they will have their own ends, and be

truer to themselves than to them? Therefore there is no better way to moderate suspicions, than to account upon such suspicions as true, and yet to bridle them as false: for so far a man ought to make use of suspicions, as to provide, as if that should be true that he suspects, yet it may do him no hurt. Suspicions that the mind of itself gathers are but buzzes; but suspicions that are artificially nourished, and put into mens heads by the tales and whisperings of others, have stings. Certainly the best mean to clear the way in this same wood of suspicions, is frankly to communicate them with the party that he suspects; for thereby he shall be sure to know more of the truth of them than he did before; and withal shall make that party more circumspect not to give farther cause of suspicion. But this would not be done to men of base natures: for they, if they find themselves once suspected, will never be true. The Italian says, "Sospetto licentia fede;" as if suspicion did give a passport to faith; but it ought rather to kindle it to discharge itself.

XXXII. OF DISCOURSE.

Some in their discourse desire rather commendation of wit, in being able to hold all arguments, than of judgment in discerning what is true; as if it were a praise to know what might be said, and not what should be thought. Some have certain common-places and themes, wherein they are good, and want variety: which kind of poverty is for the most part tedious, and, when it is once perceived, ridiculous. The honourablest part of talk is to give the occasion; and again, to moderate, and pass to somewhat else; for then a man leads the dance. It is good in discourse and speech of conversation to vary, and intermingle speech of the present occasion with arguments; tales with reasons; asking of questions with telling of opinions; and jest with earnest; for it is a dull thing to tire, and, as we say now, to jade any thing too far. As for jest, there be certain things which ought to be priviledged from it; namely, religion, matters of state, great persons, any man's present business of importance, and any case that deserveth pity. Yet there be some

that think their wits have been asleep, except they dart out somewhat that is piquant, and to the quick: that is a vein which would be bridled;

Parce, puer, stimulis, et fortius utere loris.

And generally men ought to find the difference between saltness and bitterness. Certainly he that hath a satirical vein, as he maketh others afraid of his wit, so he had need be afraid of others memory. He that questioneth much shall learn much, and content much; but especially if he apply his questions to the skill of the persons whom he asketh; for he shall give them occasion to please themselves in speaking, and himself shall continually gather knowledge. But let his questions not be troublesome, for that is fit for a poser. And let him be sure to leave other men their turns to speak. Nay, if there be any that would reign, and take up all the time, let him find means to take them off, and bring others on; as musicians use to do with those that dance too long galliards. If you dissemble sometimes your knowledge of that you are thought to know, you shall be thought another time to know that you know not. Speech of a man's self ought to be seldom, and well chosen. I knew one was wont to say in scorn, "He must needs be a wise man, he speaks so much of himself:" and there is but one case wherein a man may commend himself with good grace, and that is in commending virtue in another; especially if it be such a virtue whereunto himself pretendeth. Speech of touch towards others should be sparingly used: for discourse ought to be as a field, without coming home to any man. I knew two noblemen of the west part of England, whereof the one was given to scoff, but kept ever royal cheer in his house; the other would ask of those that had been at the other's table, "Tell truly, was there never a flout or dry blow given?" To which the guest would answer, Such and such a thing passed. The lord would say, "I thought he would mar a good dinner." Discretion of speech is more than eloquence; and to speak agreeably to him with whom we deal, is more than to speak in good words, or in good order.

A good continued speech, without a good speech of interlocution, shews slowness: and a good reply, or second speech, without a good settled speech, sheweth shallowness and weakness. As we see in beasts, that those that are weakest in the course, are yet nimblest in the turn: as it is betwixt the greyhound and the hare. To use too many circumstances ere one come to the matter, is wearisome; to use none at all, is blunt.

XXXIII. OF PLANTATIONS.

Plantations are amongst ancient, primitive, and heroical works. When the world was young, it begat more children; but now it is old, it begets fewer: for I may justly account new plantations to be the children of former kingdoms. I like a plantation in a pure soil; that is, where people are not displanted to the end to plant in others. For else it is rather an extirpation, than a plantation. Planting of countries is like planting of woods; for you must make account to lose almost twenty years profit, and expect your recompence in the end. For the principal thing that hath been the destruction of most plantations, hath been the base and hasty drawing of profit in the first years. It is true, speedy profit is not to be neglected, as far as may stand with the good of the plantation, but no farther. It is a shameful and unblessed thing, to take the scum of people, and wicked condemned men, to be the people with whom you plant; and not only so, but it spoileth the plantation; for they will ever live like rogues, and not fall to work, but be lazy, and do mischief, and spend victuals, and be quickly weary, and then certify over to their country to the discredit of the plantation. The people wherewith you plant ought to be gardeners, ploughmen, labourers, smiths, carpenters, joiners, fishermen, fowlers, with some few apothecaries, surgeons, cooks, and bakers. In a country of plantation, first look about what kind of victual the country yields of itself to hand; as chestnuts, walnuts, pine-apples, olives, dates, plumbs, cherries, wild honey, and the like, and make use of them. Then consider what victual or esculent things there are, which grow speedily and within the

year; as parsnips, carrots, turnips, onions, radishes, artichokes of Jerusalem, maiz, and the like. For wheat, barley, and oats, they ask too much labour: but with peas and beans you may begin; both because they ask less labour, and because they serve for meat, as well as for bread. And of rice likewise cometh a great increase, and it is a kind of meat. Above all, there ought to be brought store of biscuit, oatmeal, flour, meal, and the like, in the beginning, till bread may be had. For beasts or birds, take chiefly such as are least subject to diseases, and multiply fastest: as swine, goats, cocks, hens, turkeys, geese, house-doves, and the like. The victual in plantations ought to be expended almost as in a besieged town; that is, with certain allowance. And let the main part of the ground employed to gardens or corn be to a common stock; and to be laid in, and stored up, and then delivered out in proportion; besides some spots of ground that any particular person will manure for his own private. Consider likewise what commodities the soil where the plantation is doth naturally yield, that they may some way help to defray the charge of the plantation: so it be not, as was said, to the untimely prejudice of the main business; as it hath fared with tobacco in Virginia. Wood commonly aboundeth but too much: and therefore timber is fit to be one. If there be iron ore, and streams whereupon to set the mills; iron is a brave commodity where wood aboundeth. Making of bay-salt, if the climate be proper for it, would be put in experience. Growing silk likewise, if any be, is a likely commodity. Pitch and tar, where store of firs and pines are, will not fail. So drugs and sweet woods, where they are, cannot but yield great profit. Soap-ashes, likewise, and other things that may be thought of. But moil not too much under ground; for the hope of mines is very uncertain, and useth to make the planters lazy in other things. For government, let it be in the hands of one assisted with some counsel: and let them have commission to exercise martial laws with some limitation. And above all, let men make that profit of being in the wilderness, as they have God always, and his service, before their eyes.

Let not the government of the plantation depend upon too many counsellors and undertakers in the country that planteth, but upon a temperate number; and let those be rather noblemen and gentlemen, than merchants; for they look ever to the present gain. Let there be freedoms from custom, till the plantation be of strength: and not only freedom from custom, but freedom to carry their commodities where they may make their best of them, except there be some special cause of caution. Cram not in people, by sending too fast company after company; but rather hearken how they waste, and send supplies porportionably; but so as the number may live well in the plantation, and not by surcharge be in penury. It hath been a great endangering to the health of some plantations, that they have built along the sea and rivers, in marish and unwholesome grounds. Therefore though you begin there to avoid carriage, and other like discommodities, yet build still rather upwards from the streams, than along. It concerneth likewise the health of the plantation, that they have good store of salt with them, that they may use it in their victuals when it shall be necessary. If you plant where savages are, do not only entertain them with trifles and gingles; but use them justly and graciously, with sufficient guard nevertheless: and do not win their favour by helping them to invade their enemies; but for their defence it is not amiss. And send oft of them over to the country that plants, that they may see a better condition than their own, and commend it when they return. When the plantation grows to strength, then it is time to plant with women as well as men; that the plantation may spread into generations; and not be ever pieced from without. It is the sinfullest thing in the world to forsake or destitute a plantation once in forwardness: for besides the dishonour, it is the guiltiness of blood of many commiserable persons.

XXXIV. OF RICHES.

I cannot call riches better than the baggage of virtue. The Roman word is better, "impedimenta." For as the baggage is to an army, so are riches to virtue. It

cannot be spared, nor left behind, but it hindereth the march; yea, and the care of it sometimes loseth or disturbeth the victory. Of great riches there is no real use, except it be in the distribution; the rest is but conceit. So saith Solomon; "Where much is, there are many to consume it; and what hath the owner, but the sight of it with his eyes?" The personal fruition in any man, cannot reach to feel great riches: there is a custody of them; or a power of dole and donative of them; or a fame of them; but no solid use to the owner. Do you not see what feigned prices are set upon little stones and rarities? And what works of ostentation are undertaken, because there might seem to be some use of great riches? But then you will say, they may be of use, to buy men out of dangers or troubles. As Solomon saith, "Riches are as a strong hold in the imagination of the rich man." But this is excellently expressed, that it is in imagination, and not always in fact. For certainly great riches have sold more men than they have bought out. Seek not proud riches, but such as thou mayest get justly, use soberly, distribute cheerfully, and leave contentedly. Yet have no abstract nor friarly contempt of them: but distinguish, as Cicero saith well of Rabirius Posthumus; "in studio rei amplificandæ apparebat, non avaritiæ prædam, sed instrumentum bonitati quæri." Hearken also to Solomon, and beware of hasty gathering of riches: "Qui festinat ad divitias, non erit insons." The poets feign, that when Plutus, which is riches, is sent from Jupiter, he limps, and goes slowly; but when he is sent from Pluto, he runs, and is swift of foot: meaning, that riches gotten by good means and just labour, pace slowly; but when they come by the death of others, as by the course of inheritance, testaments, and the like, they come tumbling upon a man. But it might be applied likewise to Pluto, taking him for the devil. For when riches come from the devil, as by fraud, and oppression, and unjust means, they come upon speed. The ways to enrich are many, and most of them foul. Parsimony is one of the best, and yet is not innocent: for it withholdeth men from works of liberality and charity. The

improvement of the ground is the most natural obtaining of riches; for it is our great mother's blessing, the earth's; but it is slow. And yet, where men of great wealth do stoop to husbandry, it multiplieth riches exceedingly. I knew a nobleman in England that had the greatest audits of any man in my time: a great grazier, a great sheep-master, a great timber-man, a great collier, a great corn-master, a great lead-man; and so of iron, and a number of the like points of husbandry: so as the earth seemed a sea to him, in respect of the perpetual importation. It was truly observed by one, that himself came very hardly to a little riches, and very easily to great riches. For when a man's stock is come to that, that he can expect the prime of markets, and overcome those bargains, which for their greatness are few mens money, and be partner in the industries of young men, he cannot but increase mainly. The gains of ordinary trades and vocations are honest, and furthered by two things, chiefly, by diligence, and by a good name for good and fair dealing. But the gains of bargains are of a more doubtful nature, when men should wait upon others necessity; broke by servants and instruments to draw them on; put off others cunningly that would be better chapmen, and the like practices, which are crafty and naught. As for the chopping of bargains, when a man buys, not to hold, but to sell over again, that commonly grindeth double, both upon the seller, and upon the buyer. Sharings do greatly enrich, if the hands be well chosen that are trusted. Usury is the certainest means of gain, though one of the worst, as that whereby a man doth eat his bread "in sudore vultus alieni;" and besides, doth plough upon Sundays. But yet certain though it be, it hath flows; for that the scriveners and brokers do value unsound men, to serve their own turn. The fortune in being the first in an invention, or in a privilege, doth cause sometimes a wonderful overgrowth in riches; as it was with the first sugar-man in the Canaries. Therefore, if a man can play the true logician, to have as well judgment as invention, he may do great matters, especially if the times be fit. He that resteth

upon gains certain, shall hardly grow to great riches. And he that puts all upon adventures, doth oftentimes break, and come to poverty: it is good therefore to guard adventures with certainties that may uphold losses. Monopolies, and co-emption of wares for resale, where they are not restrained, are great means to enrich; especially if the party have intelligence what things are like to come into request, and to store himself beforehand. Riches gotten by service, though it be of the best rise, yet when they are gotten by flattery, feeding humours, and other servile conditions, they may be placed amongst the worst. As for fishing for testaments and executorships, as Tacitus saith of Seneca, "Testamenta et orbos tanquam indagine capi," it is yet worse; by how much men submit themselves to meaner persons, than in service. Believe not much them that seem to despise riches; for they despise them that despair of them: and none worse when they come to them. Be not penny-wise; riches have wings, and sometimes they fly away of themselves, sometimes they must be set flying to bring in more. Men leave their riches either to their kindred, or to the public: and moderate portions prosper best in both. A great estate left to an heir, is as a lure to all the birds of prey round about, to seize on him, if he be not the better established in years and judgment. Likewise glorious gifts and foundations, are like sacrifices without salt; and but the painted sepulchres of alms, which soon will putrify and corrupt inwardly. Therefore measure not thine advancements by quantity, but frame them by measure: and defer not charities till death: for certainly, if a man weigh it rightly, he that doth so, is rather liberal of another man's than of his own.

XXXV. OF PROPHECIES.

I mean not to speak of divine prophecies, nor of heathen oracles, nor of natural predictions; but only of prophecies that have been of certain memory, and from hidden causes. Saith the Pythonissa to Saul; "Tomorrow thou and thy son shall be with me." Virgil hath these verses from Homer:

At domus Æneæ cunctis dominabitur oris,
Et nati natorum, et qui nascentur ab illis.
Æneid. iii. 97.

A prophecy, as it seems, of the Roman empire. Seneca the Tragedian hath these verses:

Venient annis
Secula seris, quibus oceanus
Vincula rerum laxet, et ingens
Pateat tellus, Tiphysque novos
Detegat orbes; nec sit terris
Ultima Thule:

A prophecy of the discovery of America. The daughter of Polycrates dreamed, that Jupiter bathed her father, and Apollo anointed him: and it came to pass, that he was crucified in an open place, where the sun made his body run with sweat, and the rain washed it. Philip of Macedon dreamed he sealed up his wife's belly; whereby he did expound it, that his wife should be barren; but Aristander the soothsayer told him, his wife was with child: because men do not use to seal vessels that are empty. A phantasm that appeared to M. Brutus, in his tent, said to him, "Philippis iterum me videbis." Tiberius said to Galba, "Tu quoque, Galba, degustabis imperium." In Vespasian's time there went a prophecy in the east, that those that should come forth of Judea, should reign over the world; which though it may be was meant of our Saviour, yet Tacitus expounds it of Vespasian. Domitian dreamed, the night before he was slain, that a golden head was growing out of the nape of his neck: and indeed the succession that followed him, for many years, made golden times. Henry the sixth of England said of Henry the seventh, when he was a lad, and gave him water; "This is the lad that shall enjoy the crown for which we strive." When I was in France, I heard from one Dr. Pena, that the queen-mother, who was given to curious arts, caused the king her husband's nativity to be calculated under a false name; and the astrologer gave a judgment, that he should be killed in a duel; at which the queen laughed, thinking her husband to be above challenges and duels: but he was slain, upon a course at tilt, the

splinters of the staff of Montgomery going in at his beaver. The trivial prophecy, which I heard when I was a child, and queen Elizabeth was in the flower of her years, was;

When Hempe is spun,
England's donne.

Whereby it was generally conceived, that after the princes had reigned, which had the principal letters of that word Hempe, which were Henry, Edward, Mary, Philip, and Elizabeth, England should come to utter confusion; which, thanks be to God, is verified only in the change of the name, for that the king's style is now no more of England, but of Britain. There was also another prophecy before the year of eighty-eight, which I do not well understand:

There shall be seen upon a day,
Between the baugh and the May,
The black fleet of Norway.
When that is come and gone,
England build houses of lime and stone,
For after wars shall you have none.

It was generally conceived to be meant of the Spanish fleet that came in eighty-eight. For that the king of Spain's surname, as they say, is Norway. The prediction of Regiomontanus,

Octogesimus octavus mirabilis annus:

was thought likewise accomplished, in the sending of that great fleet, being the greatest in strength, though not in number, of all that ever swam upon the sea. As for Cleon's dream, I think it was a jest: it was, that he was devoured of a long dragon; and it was expounded of a maker of sausages, that troubled him exceedingly. There are numbers of the like kind; especially if you include dreams, and predictions of astrology. But I have set down these few only of certain credit, for example. My judgment is, that they ought all to be despised, and ought to serve but for winter talk by the fire-side. Though when I say despised, I mean it as for belief: for otherwise, the spreading or publishing of

them, is in no sort to be despised; for they have done much mischief. And I see many severe laws made to suppress them. That that hath given them grace, and some credit, consisteth in three things: first, that men mark when they hit, and never mark when they miss; as they do, generally, also of dreams. The second is, that probable conjectures, or obscure traditions, many times, turn themselves into prophecies: while the nature of man, which coveteth divination, thinks it no peril to foretel that, which indeed they do but collect; as that of Seneca's verse. For so much was then subject to demonstration, that the globe of the earth had great parts beyond the Atlantic, which might be probably conceived not to be all sea: and adding thereto, the tradition in Plato's Timæus, and his Atlanticus, it might encourage one to turn it to a prediction. The third and last, which is the great one, is, that almost all of them, being infinite in number, have been impostures, and by idle and crafty brains, merely contrived and feigned, after the event passed.

XXXVI. OF AMBITION.

Ambition is like choler, which is an humour that maketh men active, earnest, full of alacrity, and stirring, if it be not stopped. But if it be stopped, and cannot have its way, it becometh adust, and thereby malign and venomous. So ambitious men, if they find the way open for their rising, and still get forward, they are rather busy than dangerous; but if they be checked in their desires, they become secretly discontent, and look upon men and matters with an evil eye, and are best pleased when things go backward; which is the worst property in a servant of a prince or state. Therefore it is good for princes, if they use ambitious men, to handle it so, as they be still progressive, and not retrograde; which, because it cannot be without inconvenience, it is good not to use such natures at all. For if they rise not with their service, they will take order to make their service fall with them. But since we have said it were good not to use men of ambitious natures, except it be upon necessity, it is fit we speak, in

what cases they are of necessity. Good commanders in the wars must be taken, be they never so ambitious: for the use of their service dispenseth with the rest; and to take a soldier without ambition, is to pull off his spurs. There is also great use of ambitious men, in being screens to princes, in matters of danger and envy: for no man will take that part, except he be like a seeled dove, that mounts, and mounts, because he cannot see about him. There is use also of ambitious men in pulling down the greatness of any subject that over-tops; as Tiberius used Macro in the pulling down of Sejanus. Since therefore they must be used in such cases, there resteth to speak how they are to be bridled, that they may be less dangerous. There is less danger of them, if they be of mean birth, than if they be noble; and if they be rather harsh of nature, than gracious and popular; and if they be rather new raised, than grown cunning and fortified in their greatness. It is counted by some a weakness in princes to have favourites; but it is, of all others, the best remedy against ambitious great ones. For when the way of pleasuring and displeasuring lieth by the favourite, it is impossible any other should be over-great. Another means to curb them, is to balance them by others as proud as they. But then there must be some middle counsellors to keep things steady; for without that ballast the ship will roll too much. At the least a prince may animate and inure some meaner persons, to be as it were scourges to ambitious men. As for the having of them obnoxious to ruin, if they be of fearful natures, it may do well: but if they be stout and daring, it may precipitate their designs, and prove dangerous. As for the pulling of them down, if the affairs require it, and that it may not be done with safety suddenly, the only way is, the interchange continually of favours and disgraces, whereby they may not know what to expect, and be as it were in a wood. Of ambitions, it is less harmful the ambition to prevail in great things, than that other to appear in every thing; for that breeds confusion, and mars business:

but yet it is less danger to have an ambitious man stirring in business, than great in dependences. He that seeketh to be eminent amongst able men, hath a great task; but that is ever good for the public. But he that plots to be the only figure amongst ciphers, is the decay of a whole age. Honour hath three things in it: the vantage ground to do good; the approach to kings and principal persons; and the raising of a man's own fortunes. He that hath the best of these intentions, when he aspireth, is an honest man: and that prince that can discern of these intentions in another that aspireth, is a wise prince. Generally let princes and states choose such ministers as are more sensible of duty than of rising; and such as love business rather upon conscience, than upon bravery: and let them discern a busy nature from a willing mind.

XXXVII. OF MASQUES AND TRIUMPHS.

These things are but toys to come amongst such serious observations. But yet, since princes will have such things, it is better they should be graced with elegancy, than daubed with cost. Dancing to song, is a thing of great state and pleasure. I understand it, that the song be in quire, placed aloft, and accompanied with some broken music: and the ditty fitted to the device. Acting in song, especially in dialogues, hath an extreme good grace; I say acting, not dancing, (for that is a mean and vulgar thing,) and the voices of the dialogue should be strong and manly, a base, and a tenor; no treble, and the ditty high and tragical; not nice or dainty. Several quires placed one over-against another, and taking the voice by catches, anthem-wise, give great pleasure. Turning dances into figure, is a childish curiosity. And generally let it be noted, that those things which I here set down, are such as do naturally take the sense, and not respect petty wonderments. It is true, the alterations of scenes, so it be quietly and without noise, are things of great beauty and pleasure; for they feed and relieve the eye before it be full of the same object. Let the scenes abound with light, specially coloured and varied: and let the

maskers, or any other that are to come down from the scene, have some motions upon the scene itself before their coming down; for it draws the eye strangely, and makes it with great pleasure to desire to see that it cannot perfectly discern. Let the songs be loud and chearful, and not chirpings or pulings. Let the music likewise be sharp and loud, and well placed. The colours that shew best by candle-light, are white, carnation, and a kind of sea-water green; and ouches, or spangs, as they are of no great cost, so they are of most glory. As for rich embroidery, it is lost, and not discerned. Let the suits of the maskers be graceful, and such as become the person when the vizards are off: not after examples of known attires; Turks, soldiers, mariners, and the like. Let anti-masks not be long; they have been commonly of fools, satyrs, baboons, wild men, antics, beasts, spirits, witches, Ethiopes, pigmies, turquets, nymphs, rustics, Cupids, statues moving, and the like. As for angels, it is not comical enough to put them in anti-masks; and any thing that is hideous, as devils, giants, is on the other side as unfit: but chiefly, let the music of them be recreative, and with some strange changes. Some sweet odours suddenly coming forth without any drops falling, are in such a company, as there is steam and heat, things of great pleasure and refreshment. Double masques, one of men, another of ladies, addeth state and variety. But all is nothing except the room be kept clear and neat.

For justs, and tourneys, and barriers, the glories of them are chiefly in the chariots, wherein the challengers make their entry; especially if they be drawn with strange beasts; as lions, bears, camels, and the like: or in the devices of their entrance, or in the bravery of their liveries: or in the goodly furniture of their horses and armour. But enough of these toys.

XXXVIII. OF NATURE IN MEN.

Nature is often hidden, sometimes overcome, seldom extinguished. Force maketh nature more violent in the return; doctrine and discourse maketh nature less importune: but custom only doth alter and subdue nature.

He that seeketh victory over his nature, let him not set himself too great, nor too small tasks; for the first will make him dejected by often failings; and the second will make him a small proceeder, though by often prevailings. And at the first, let him practise with helps, as swimmers do with bladders or rushes: but after a time, let him practise with disadvantages, as dancers do with thick shoes. For it breeds great perfection, if the practice be harder than the use. Where nature is mighty, and therefore the victory hard, the degrees had need be, first to stay and arrest nature in time; like to him that would say over the four and twenty letters when he was angry: then to go less in quantity; as if one should, in forbearing wine, come from drinking healths, to a draught at a meal; and lastly, to discontinue altogether. But if a man have the fortitude and resolution to enfranchise himself at once, that is the best:

Optimus ille animi vindex, lædentia pectus
Vincula qui rupit, dedoluitque semel.

Neither is the ancient rule amiss, to bend nature as a wand to a contrary extreme, whereby to set it right: understanding it where the contrary extreme is no vice. Let not a man force a habit upon himself with a perpetual continuance, but with some intermission. For both the pause reinforceth the new onset; and if a man that is not perfect be ever in practice, he shall as well practise his errors as his abilities, and induce one habit of both; and there is no means to help this but by seasonable intermissions. But let not a man trust his victory over his nature too far; for nature will lie buried a great time, and yet revive upon the occasion or temptation. Like as it was with Æsop's damsel, turned from a cat to a woman, who sat very demurely at the board's end, till a mouse ran before her. Therefore let a man either avoid the occasion altogether, or put himself often to it, that he may be little moved with it. A man's nature is best perceived in privateness, for there is no affectation; in passion, for that putteth a man out of his precepts; and in a new case or experiment, for there custom leaveth him. They are happy

men, whose natures sort with their vocations; otherwise they may say, "Multum incola fuit anima mea:" when they converse in those things they do not affect. In studies, whatsoever a man commandeth upon himself, let him set hours for it; but whatsoever is agreeable to his nature, let him take no care for any set times; for his thoughts will fly to it of themselves; so as the spaces of other business or studies will suffice. A man's nature runs either to herbs, or weeds: Therefore let him seasonably water the one, and destroy the other.

XXXIX. OF CUSTOM AND EDUCATION.

Mens thoughts are much according to their inclination; their discourse and speeches according to their learning and infused opinions; but their deeds are after as they have been accustomed. And therefore, as Machiavel well noteth, though in an evil-favoured instance, there is no trusting to the force of nature, nor to the bravery of words, except it be corroborate by custom. His instance is, that for the atchieving of a desperate conspiracy a man should not rest upon the fierceness of any man's nature, or his resolute undertakings; but take such an one as hath had his hands formerly in blood. But Machiavel knew not of a friar Clement, nor a Ravillac, nor a Jaureguy, nor a Baltazar Gerard: yet his rule holdeth still, that nature, nor the engagement of words, are not so forcible as custom. Only superstition is now so well advanced, that men of the first blood are as firm as butchers by occupation: and votary resolution is made equipollent to custom, even in matter of blood. In other things, the predominancy of custom is every where visible; insomuch as a man would wonder to hear men profess, protest, engage, give great words, and then do just as they have done before: as if they were dead images, and engines moved only by the wheels of custom. We see also the reign or tyranny of custom what it is. The Indians, I mean the sect of their wise men, lay themselves quietly upon a stack of wood, and so sacrifice themselves by fire. Nay, the wives strive to be burned with the corps of their husbands. The lads of Sparta, of ancient time, were wont to be scourged upon the altar of Diana, without so

much as quenching. I remember in the beginning of queen Elizabeth's time of England, an Irish rebel condemned put up a petition to the deputy that he might be hanged in a with, and not in an halter, because it had been so used with former rebels. There be monks in Russia, for penance, that will sit a whole night in a vessel of water, till they be engaged with hard ice. Many examples may be put of the force of custom, both upon mind and body. Therefore since custom is the principal magistrate of man's life, let men by all means endeavour to obtain good customs. Certainly custom is most perfect, when it beginneth in young years: this we call education, which is, in effect, but an early custom. So we see in languages, the tongue is more pliant to all expressions and sounds, the joints are more supple to all feats of activity and motions, in youth than afterwards. For it is true, that late learners cannot so well take the ply, except it be in some minds that have not suffered themselves to fix, but have kept themselves open and prepared to receive continual amendment, which is exceeding rare. But if the force of custom simple and separate be great; the force of custom copulate and conjoined, and collegiate, is far greater. For there example teacheth, company comforteth, emulation quickeneth, glory raiseth: so as in such places the force of custom is in its exaltation. Certainly the great multiplication of virtues upon human nature resteth upon societies well ordained and disciplined. For common-wealths and good governments do nourish virtue grown, but do not much mend the seeds. But the misery is, that the most effectual means are now applied to the ends least to be desired.

XL. OF FORTUNE.

It cannot be denied but outward accidents conduce much to fortune: favour, opportunity, death of others, occasion fitting virtue. But chiefly, the mold of a man's fortune is in his own hands. "Faber quisque fortunæ suæ;" saith the poet. And the most frequent of external causes is, that the folly of one man is the fortune of another. For no man prospers so suddenly as by others

errors. "Serpens nisi serpentem comederit non fit draco." Overt and apparent virtues bring forth praise; but there be secret and hidden virtues that bring forth fortune; certain deliveries of a man's self, which have no name. The Spanish name, *desemboltura*, partly expresseth them: when there be not stonds, nor restiveness in a man's nature; but that the wheels of his mind keep way with the wheels of his fortune. For so Livy, after he had described Cato Major in these words; "in illo viro, tantum robur corporis et animi fuit, ut quocunque loco natus esset, fortunam sibi facturus videretur;" falleth upon that, that he had *versatile ingenium*. Therefore if a man look sharply and attentively, he shall see fortune: for though she be blind, yet she is not invisible. The way of fortune is like the milky way in the sky; which is a meeting or knot of a number of small stars, not seen asunder, but giving light together. So are there a number of little and scarce discerned virtues, or rather faculties and customs, that make men fortunate. The Italians note some of them, such as a man would little think. When they speak of one that cannot do amiss, they will throw into his other conditions, that he hath "Poco di matto." And certainly there be not two more fortunate properties, than to have a little of the fool, and not too much of the honest. Therefore extreme lovers of their country, or masters, were never fortunate, neither can they be. For when a man placeth his thoughts without himself, he goeth not his own way. An hasty fortune maketh an enterprizer and remover; the French hath it better, *entreprenant*, or *remuant*, but the exercised fortune maketh the able man. Fortune is to be honoured and respected, and it be but for her daughters, Confidence and Reputation. For those two felicity breedeth: the first within a man's self; the latter in others towards him. All wise men, to decline the envy of their own virtues, use to ascribe them to Providence and fortune; for so they may the better assume them: and besides, it is greatness in a man to be the care of the higher powers. So Cæsar said to the pilot in the tempest, "Cæsarem portas, et fortunam ejus." So Sylla chose the name of *felix*, and not of *magnus*: and it hath been noted, that

those that ascribe openly too much to their own wisdom and policy, end unfortunate. It is written, that Timotheus the Athenian, after he had, in the account he gave to the state of his government, often interlaced this speech, "And in this fortune had no part;" never prospered in any thing he undertook afterwards. Certainly there be, whose fortunes are like Homer's verses, that have a slide and easiness more than the verses of other poets: as Plutarch saith of Timoleon's fortune, in respect of that of Agesilaus or Epaminondas. And that this should be, no doubt it is much in a man's self.

XLI. OF USURY.

Many have made witty invectives against usury. They say, That it is pity the devil should have God's part, which is the tithe. That the usurer is the greatest sabbath-breaker, because his plough goeth every Sunday. That the usurer is the drone that Virgil speaketh of:

Ignavum fucos pecus a præsepibus arcent.

That the usurer breaketh the first law that was made for mankind after the fall; which was, "In sudore vultus tui comedes panem tuum;" not, "In sudore vultus alieni." That usurers should have orange-tawney bonnets, because they do judaize. That it is against nature, for money to beget money: and the like. I say this only, that usury is a "concessum propter duritiem cordis:" for since there must be borrowing and lending, and men are so hard of heart as they will not lend freely, usury must be permitted. Some others have made suspicious and cunning propositions of banks, discovery of mens estates, and other inventions. But few have spoken of usury usefully. It is good to set before us the incommodities and commodities of usury; that the good may be either weighed out, or culled out; and warily to provide, that while we make forth to that which is better, we meet not with that which is worse.

The discommodities of usury are: first, that it makes fewer merchants. For were it not for this lazy trade of usury, money would not lie still, but would in great part be employed upon merchandizing; which is the *vena porta* of wealth in a state. The second, that it makes

poor merchants. For as a farmer cannot husband his ground so well, if he sit at a great rent; so the merchant cannot drive his trade so well, if he sit at great usury. The third is incident to the other two; and that is, the decay of customs of kings or states, which ebb or flow with merchandizing. The fourth, that it bringeth the treasure of a realm or state into a few hands. For the usurer being at certainties, and others at uncertainties, at the end of the game most of the money will be in the box; and ever a state flourisheth, when wealth is more equally spread. The fifth, that it beats down the price of land: for the employment of money is chiefly either merchandizing or purchasing; and usury way-lays both. The sixth, that it doth dull and damp all industries, improvements, and new inventions, wherein money would be stirring, if it were not for this slug. The last, that it is the canker and ruin of many mens estates, which in process of time breeds a public poverty.

On the other side, the commodities of usury are: first, that howsoever usury in some respect hindereth merchandizing, yet in some other it advanceth it; for it is certain that the greatest part of trade is driven by young merchants, upon borrowing at interest; so as if the usurer either call in or keep back his money, there will ensue presently a great stand of trade. The second is, that were it not for this easy borrowing upon interest, mens necessities would draw upon them a most sudden undoing; in that they would be forced to sell their means, be it lands or goods, far under foot; and so whereas usury doth but gnaw upon them, bad markets would swallow them quite up. As for mortgaging or pawning, it will little mend the matter; for either men will not take pawns without use; or if they do, they will look precisely for the forfeiture. I remember a cruel moneyed man in the country, that would say; "The devil take this usury, it keeps us from forfeitures of mortgages and bonds." The third and last is, that it is a vanity to conceive, that there would be ordinary borrowing without profit; and it is impossible to conceive the number of inconveniences that will ensue, if borrowing be cramped. Therefore to speak of the abolishing of usury is idle. All states have

ever had it in one kind or rate, or other. So as that opinion must be sent to Utopia.

To speak now of the reformation and reglement of usury: how the discommodities of it may be best avoided, and the commodities retained: it appears by the balance of commodities and discommodities of usury, two things are to be reconciled. The one, that the tooth of usury be grinded that it bite not too much: the other, that there be left open a means to invite monied men to lend to the merchants, for the continuing and quickening of trade. This cannot be done, except you introduce two several sorts of usury, a less and a greater. For if you reduce usury to one low rate, it will ease the common borrower, but the merchant will be to seek for money. And it is to be noted, that the trade of merchandize being the most lucrative, may bear usury at a good rate; other contracts not so.

To serve both intentions, the way would be briefly thus. That there be two rates of usury; the one free and general for all; the other under licence only to certain persons, and in certain places of merchandizing. First therefore let usury in general be reduced to five in the hundred; and let that rate be proclaimed to be free and current; and let the state shut itself out to take any penalty for the same. This will preserve borrowing from any general stop or dryness. This will ease infinite borrowers in the country. This will in good part raise the price of land, because land purchased at sixteen years purchase, will yield six in the hundred and somewhat more, whereas this rate of interest yields but five. This by like reason will encourage and edge industrious and profitable improvements; because many will rather venture in that kind, than take five in the hundred, especially having been used to greater profit. Secondly, let there be certain persons licensed to lend to known merchants, upon usury at a higher rate: and let it be with the cautions following. Let the rate be, even with the merchant himself, somewhat more easy than that he used formerly to pay: for by that means all borrowers shall have some ease by this reformation, be he merchant or whosoever. Let it be no bank, or common stock, but

every man be master of his own money. Not that I altogether mislike banks, but they will hardly be brooked in regard of certain suspicions. Let the state be answered some small matter for the licence, and the rest left to the lender; for if the abatement be but small, it will no whit discourage the lender. For he, for example, that took before ten or nine in the hundred, will sooner descend to eight in the hundred, than give over his trade of usury; and go from certain gains, to gains of hazard. Let these licensed lenders be in number indefinite, but restrained to certain principal cities and towns of merchandizing: for then they will be hardly able to colour other mens moneys in the country; so as the licence of nine will not suck away the current rate of five: for no man will send his moneys far off, nor put them into unknown hands.

If it be objected, that this doth in a sort authorise usury, which before was in some places but permissive: the answer is, that it is better to mitigate usury by declaration, than to suffer it to rage by connivance.

XLII. OF YOUTH AND AGE.

A man that is young in years, may be old in hours, if he have lost no time. But that happeneth rarely. Generally youth is like the first cogitations, not so wise as the second. For there is a youth in thoughts, as well as in ages. And yet the invention of young men is more lively than that of old; and imaginations stream into their minds better, and as it were more divinely. Natures that have much heat, and great and violent desires and perturbations, are not ripe for action, till they have passed the meridian of their years: as it was with Julius Cæsar, and Septimius Severus. Of the latter of whom it is said, "Juventutem egit erroribus, imo furoribus, plenam." And yet he was the ablest emperor almost of all the list. But reposed natures may do well in youth: as it is seen in Augustus Cæsar, Cosmus duke of Florence, Gaston de Fois, and others. On the other side, heat and vivacity in age is an excellent composition for business. Young men are fitter to invent than to judge; fitter for execution than for counsel; and fitter

for new projects than for settled business. For the experience of age, in things that fall within the compass of it, directeth them; but in new things abuseth them. The errors of young men are the ruin of business; but the errors of aged men amount but to this; that more might have been done, or sooner. Young men, in the conduct and manage of actions, embrace more than they can hold; stir more than they can quiet; fly to the end, without consideration of the means and degrees; pursue some few principles, which they have chanced upon, absurdly; care not to innovate, which draws unknown inconveniences; use extreme remedies at first; and, that which doubleth all errors, will not acknowledge or retract them; like an unready horse, that will neither stop nor turn. Men of age object too much, consult too long, adventure too little, repent too soon, and seldom drive business home to the full period; but content themselves with a mediocrity of success. Certainly it is good to compound employments of both; for that will be good for the present, because the virtues of either age may correct the defects of both: and good for succession, that young men may be learners, while men in age are actors: and lastly, good for extern accidents, because authority followeth old men, and favour and popularity youth. But for the moral part, perhaps youth will have the pre-eminence, as age hath for the politic. A certain Rabbin upon the text, "Your young men shall see visions, and your old men shall dream dreams;" inferreth, that young men are admitted nearer to God than old; because vision is a clearer revelation than a dream. And certainly the more a man drinketh of the world, the more it intoxicateth; and age doth profit rather in the powers of understanding, than in the virtues of the will and affections. There be some have an over-early ripeness in their years, which fadeth betimes: these are first, such as have brittle wits, the edge whereof is soon turned; such as was Hermogenes the rhetorician, whose books are exceeding subtile; who afterwards waxed stupid. A second sort is of those that have some natural dispositions, which have better grace in youth than in age: such as is a fluent and luxuriant speech; which becomes

youth well, but not age. So Tully saith of Hortensius; "Idem manebat, neque idem decebat." The third is, of such as take too high a strain at the first; and are magnanimous, more than tract of years can uphold. As was Scipio Africanus, of whom Livy saith in effect; "Ultima primis cedebant."

XLIII. OF BEAUTY.

Virtue is like a rich stone, best plain set: and surely virtue is best in a body that is comely, though not of delicate features; and that hath rather dignity of presence, than beauty of aspect. Neither is it almost seen, that very beautiful persons are otherwise of great virtue. As if nature were rather busy not to err, than in labour to produce excellency. And therefore they prove accomplished, but not of great spirit; and study rather behaviour than virtue. But this holds not always; for Augustus Cæsar, Titus Vespasianus, Philip le Bel of France, Edward the fourth of England, Alcibiades of Athens, Ismael the sophi of Persia, were all high and great spirits; and yet the most beautiful men of their times. In beauty, that of favour is more than that of colour; and that of decent and gracious motion more than that of favour. That is the best part of beauty, which a picture cannot express; no nor the first sight of the life. There is no excellent beauty, that hath not some strangeness in the proportion. A man cannot tell, whether Apelles or Albert Durer were the more trifler; whereof the one would make a personage by geometrical proportions; the other, by taking the best parts out of divers faces, to make one excellent. Such personages, I think, would please nobody but the painter that made them. Not but I think a painter may make a better face than ever was; but he must do it by a kind of felicity, as a musician that maketh an excellent air in music, and not by rule. A man shall see faces, that if you examine them part by part, you shall never find a good; and yet altogether do well. If it be true, that the principal part of beauty is in decent motion, certainly, it is no marvel, though persons in years seem many times more amiable; "pulchrorum autumnus

pulcher:" for no youth can be comely but by pardon, and considering the youth, as to make up the comeliness. Beauty is as summer fruits, which are easy to corrupt, and cannot last: and for the most part it makes a dissolute youth, and an age a little out of countenance: but yet certainly again, if it light well, it maketh virtues shine, and vices blush.

XLIV. OF DEFORMITY.

Deformed persons are commonly even with nature; for as nature hath done ill by them, so do they by nature; being for the most part, as the Scripture saith, "void of natural affection:" and so they have their revenge of nature. Certainly there is a consent between the body and the mind, and where nature erreth in the one, she ventureth in the other. "Ubi peccat in uno, periclitatur in altero." But because there is in man an election touching the frame of his mind, and a necessity in the frame of his body, the stars of natural inclination are sometimes obscured by the sun of discipline and virtue: therefore it is good to consider of deformity, not as a sign which is more deceivable, but as a cause which seldom faileth of the effect. Whosoever hath any thing fixed in his person that doth induce contempt, hath also a perpetual spur in himself, to rescue and deliver himself from scorn; therefore all deformed persons are extreme bold. First, as in their own defence, as being exposed to scorn; but in process of time, by a general habit. Also it stirreth in them industry, and especially of this kind, to watch and observe the weakness of others, that they may have somewhat to repay. Again, in their superiors it quencheth jealousy towards them, as persons that they think they may at pleasure despise: and it layeth their competitors and emulators asleep; as never believing they should be in possibility of advancement, till they see them in possession. So that, upon the matter, in a great wit deformity is an advantage to rising. Kings in ancient times, and at this present, in some countries, were wont to put great trust in eunuchs, because they that are envious towards all, are more obnoxious and officious towards one. But yet their

trust towards them hath rather been as to good spials and good whisperers, than good magistrates and officers. And much like is the reason of deformed persons. Still the ground is, they will, if they be of spirit, seek to free themselves from scorn; which must be either by virtue or malice. And therefore let it not be marvelled, if sometimes they prove excellent persons; as was Agesilaus, Zanger the son of Solyman, Æsop, Gasca president of Peru; and Socrates may go likewise amongst them, with others.

XLV. OF BUILDING.

Houses are built to live in, and not to look on; therefore let use be preferred before uniformity, except where both may be had. Leave the goodly fabrics of houses for beauty only, to the inchanted palaces of the poets: who build them with small cost. He that builds a fair house upon an ill seat, committeth himself to prison. Neither do I reckon it an ill seat only, where the air is unwholesome, but likewise where the air is unequal; as you shall see many fine seats, set upon a knap of ground, environed with higher hills round about it, whereby the heat of the sun is pent in, and the wind gathereth as in troughs; so as you shall have, and that suddenly, as great diversity of heat and cold, as if you dwelt in several places. Neither is it ill air only that maketh an ill seat; but ill ways, ill markets; and, if you will consult with Momus, ill neighbours. I speak not of many more; want of water, want of wood, shade, and shelter; want of fruitfulness, and mixture of grounds of several natures; want of prospect; want of level grounds; want of places at some near distance for sports of hunting, hawking, and races; too near the sea, too remote; having the commodity of navigable rivers, or the discommodity of their overflowing; too far off from great cities, which may hinder business; or too near them, which lurcheth all provisions, and maketh every thing dear; where a man hath a great living laid together, and where he is scanted: all which, as it is impossible perhaps to find together, so it is good to know them, and think of them, that a man may take as many as

he can: and if he have several dwellings, that he sort them so, that what he wanteth in the one, he may find in the other. Lucullus answered Pompey well, who, when he saw his stately galleries and rooms, so large and lightsome in one of his houses, said, "Surely an excellent place for summer, but how do you do in winter?" Lucullus answered, "Why, do you not think me as wise as some fowls are, that ever change their abode towards the winter?"

To pass from the seat to the house itself, we will do as Cicero doth in the orator's art, who writes books "De Oratore," and a book he entitles "Orator:" whereof the former delivers the precepts of the art, and the latter the perfection. We will therefore describe a princely palace, making a brief model thereof. For it is strange to see, now in Europe, such huge buildings as the Vatican, and Escurial, and some others be, and yet scarce a very fair room in them.

First therefore, I say, you cannot have a perfect palace, except you have two several sides; a side for the banquet, as is spoken of in the book of Esther; and a side for the household: the one for feasts and triumphs, the other for dwelling. I understand both these sides to be not only returns, but parts of the front; and to be uniform without, though severally partitioned within; and to be on both sides of a great and stately tower, in the midst of the front; that as it were joineth them together on either hand. I would have on the one side of the banquet, in front, one only goodly room above stairs, of some forty foot high; and under it a room for a dressing or preparing place, at times of triumphs. On the other side, which is the household side, I wish it divided at the first into a hall and a chapel, with a partition between, both of good state and bigness; and those not to go all the length, but to have at the farther end a winter and a summer parlour, both fair: and under these rooms a fair and large cellar sunk under ground; and likewise some privy kitchens, with butteries and pantries, and the like. As for the tower, I would have it two stories, of eighteen foot high apiece, above the two wings; and goodly leads upon the top, railed,

with statues interposed; and the same tower to be divided into rooms, as shall be thought fit. The stairs likewise to the upper rooms, let them be upon a fair open newel, and finely railed in, with images of wood cast into a brass colour; and a very fair landing-place at the top. But this to be, if you do not appoint any of the lower rooms for a dining-place of servants; for otherwise you shall have the servants dinner after your own: for the steam of it will come up as in a tunnel. And so much for the front. Only I understand the height of the first stairs to be sixteen foot, which is the height of the lower room.

Beyond this front is there to be a fair court, but three sides of it of a far lower building than the front. And in all the four corners of that court, fair staircases cast into turrets on the outside, and not within the row of buildings themselves: but those towers are not to be of the height of the front, but rather proportionable to the lower building. Let the court not be paved, for that striketh up a great heat in summer, and much cold in winter: but only some side alleys, with a cross, and the quarters to graze, being kept shorn, but not too near shorn. The row of return on the banquet side, let it be all stately galleries; in which galleries let there be three, or five, fine cupolas, in the length of it, placed at equal distance; and fine coloured windows of several works. On the household side, chambers of presence and ordinary entertainments, with some bed-chambers; and let all three sides be a double house, without thorough lights on the sides, that you may have rooms from the sun, both for forenoon and afternoon. Cast it also, that you may have rooms both for summer and winter; shady for summer, and warm for winter. You shall have sometimes fair houses so full of glass, that one cannot tell where to become to be out of the sun or cold. For imbowed windows, I hold them of good use (in cities, indeed, upright do better, in respect of the uniformity towards the street), for they be pretty retiring places for conference; and besides, they keep both the wind and sun off; for that which would strike almost through

the room, doth scarce pass the window. But let them be but few, four in the court, on the sides only.

Beyond this court, let there be an inward court, of the same square and height, which is to be environed with the garden on all sides: and in the inside, cloistered on all sides upon decent and beautiful arches, as high as the first story: on the under story, towards the garden, let it be turned to a grotto, or place of shade or estivation: and only have opening and windows towards the garden, and be level upon the floor, no whit sunk under ground, to avoid all dampishness. And let there be a fountain, or some fair work of statues, in the midst of this court; and to be paved as the other court was. These buildings to be for privy lodgings on both sides, and the end for privy galleries: whereof you must foresee, that one of them be for an infirmary, if the prince or any special person should be sick, with chambers, bed-chamber, antecamera and recamera, joining to it. This upon the second story. Upon the ground-story, a fair gallery, open, upon pillars; and upon the third story, likewise, an open gallery, upon pillars, to take the prospect and freshness of the garden. At both corners of the farther side, by way of return, let there be two delicate or rich cabinets, daintily paved, richly hanged, glazed with crystalline glass, and a rich cupola in the midst; and all other elegancy that may be thought upon. In the upper gallery too, I wish that there may be, if the place will yield it, some fountains running in divers places from the wall, with some fine avoidances. And thus much for the model of the palace; save that you must have, before you come to the front, three courts: a green court plain, with a wall about it: a second court of the same, but more garnished, with little turrets, or rather embellishments upon the wall; and a third court, to make a square with the front, but not to be built, nor yet inclosed with a naked wall, but inclosed with terraces, leaded aloft, and fairly garnished on the three sides; and cloistered on the inside with pillars, and not with arches below. As for offices, let them stand at distance, with some low galleries to pass from them to the palace itself.

XLVI. OF GARDENS.

God Almighty first planted a garden: and indeed it is the purest of human pleasures. It is the greatest refreshment of the spirits of man; without which, buildings and palaces are but gross handy-works: and a man shall ever see, that when ages grow to civility and elegancy, men come to build stately, sooner than to garden finely; as if gardening were the greater perfection. I do hold it, in the royal ordering of gardens, there ought to be gardens for all the months in the year: in which, severally, things of beauty may be then in season. For December and January, and the latter part of November, you must take such things as are green all winter; holly; ivy; bays; juniper; cypress-trees; yew; pine-apple trees; fir-trees; rosemary; lavender; periwinkle; the white, the purple, and the blue; germander; flags; orange-trees; lemon-trees; and myrtles, if they be stoved; and sweet marjoram, warm set. There followeth, for the latter part of January and February, the mezereon tree, which then blossoms; crocus vernus, both the yellow and the gray; primroses; anemonies; the early tulip; hyacinthus orientalis; chamaïris; fritellaria. For March there come violets, especially the single blue, which are the earliest; the yellow daffodil; the daisy; the almond-tree in blossom; the peach-tree in blossom; the cornelian-tree in blossom; sweet briar. In April follow the double white violet; the wall-flower; the stock-gilliflower; the cowslip; flower-de-luces; and lilies of all natures; rosemary-flowers; the tulip; the double piony; the pale daffodil; the French honey-suckle; the cherry-tree in blossom; the damascene and plum-trees in blossom; the white-thorn in leaf; the lilach-tree. In May and June come pinks of all sorts; especially the blush pink; roses of all kinds, except the musk, which comes later; honey-suckles; strawberries; bugloss; columbine; the French marygold: flos Africanus; cherry-tree in fruit; ribes; figs in fruit; rasps; vine-flowers; lavender in flowers; the sweet satyrian, with the white flower; herba muscaria; lilium convallium; the apple-tree in blossom. In July come gilli-

flowers of all varieties; musk roses; the lime tree in blossom; early pears and plums in fruit, gennitings, codlins. In August come plums of all sorts in fruit; pears; apricots; berberries; filberds; musk melons; monks-hoods, of all colours. In September come grapes; apples; poppies of all colours; peaches; melo-cotones; nectarines; cornelians; wardens; quinces. In October, and the beginning of November, come services; medlars; bullaces; roses cut or removed to come late; hollyoaks, and such like. These particulars are for the climate of London: but my meaning is perceived, that you may have *ver perpetuum*, as the place affords.

And because the breath of flowers is far sweeter in the air, where it comes and goes, like the warbling of music, than in the hand, therefore nothing is more fit for that delight, than to know what be the flowers and plants that do best perfume the air. Roses, damask and red, are fast flowers of their smells; so that you may walk by a whole row of them, and find nothing of their sweetness: yea, though it be in a morning's dew. Bays likewise yield no smell, as they grow; rosemary, little; nor sweet marjoram. That which above all others yields the sweetest smell in the air, is the violet; especially the white double violet, which comes twice a year; about the middle of April, and about Bartholomew-tide. Next to that is the musk rose; then the strawberry-leaves dying, with a most excellent cordial smell; then the flower of the vines; it is a little dust, like the dust of a bent, which grows upon the cluster, in the first coming forth; then sweet-brier: then wall-flowers, which are very delightful, to be set under a parlour, or lower chamber window; then pinks and gilliflowers, especially the matted pink, and clove-gilliflower; then the flowers of the lime-tree; then the honey-suckles, so they be somewhat afar off. Of bean-flowers I speak not, because they are field-flowers; but those which perfume the air most delightfully, not passed by as the rest, but being trodden upon and crushed, are three; that is, burnet, wild thyme, and water mints. Therefore you are to set whole alleys of them, to have the pleasure when you walk or tread.

For gardens, speaking of those which are indeed prince-like, as we have done of buildings, the contents ought not well to be under thirty acres of ground, and to be divided into three parts: a green in the entrance; a heath or desert in the going forth; and the main garden in the midst; besides alleys on both sides. And I like well, that four acres of ground be assigned to the green, six to the heath, four and four to either side, and twelve to the main garden. The green hath two pleasures; the one, because nothing is more pleasant to the eye than green grass kept finely shorn; the other, because it will give you a fair alley in the midst; by which you may go in front upon a stately hedge, which is to inclose the garden. But because the alley will be long, and in great heat of the year or day, you ought not to buy the shade in the garden by going in the sun through the green; therefore you are, of either side the green, to plant a covert alley, upon carpenters work, about twelve foot in height, by which you may go in shade into the garden. As for the making of knots or figures, with divers coloured earths, that they may lie under the windows of the house, on that side which the garden stands, they be but toys; you may see as good sights, many times, in tarts. The garden is best to be square, encompassed on all the four sides with a stately arched hedge: the arches to be upon pillars of carpenters work, of some ten foot high, and six foot broad; and the spaces between of the same dimension with the breadth of the arch. Over the arches let there be an entire hedge, of some four foot high, framed also upon carpenters work; and upon the upper hedge, over every arch, a little turret, with a belly enough to receive a cage of birds; and over every space between the arches, some other little figure, with broad plates of round coloured glass, gilt, for the sun to play upon. But this hedge I intend to be raised upon a bank, not steep, but gently slope, of some six foot, set all with flowers. Also I understand, that this square of the garden should not be the whole breadth of the ground, but to leave on either side ground enough for diversity of side alleys; unto which the two covert alleys of the green may de-

liver you: but there must be no alleys with hedges at either end of this great inclosure; not at the hither end, for letting your prospect upon the fair hedge from the green; nor at the further end, for letting your prospect from the hedge, through the arches, upon the heath.

For the ordering of the ground within the great hedge, I leave it to variety of device; advising nevertheless, that whatsoever form you cast it into, first it be not too busy, or full of work: wherein I, for my part, do not like images cut out in juniper or other garden stuff; they be for children. Little low hedges round, like welts, with some pretty pyramids, I like well; and in some places, fair columns upon frames of carpenters work. I would also have the alleys spacious and fair. You may have closer alleys upon the side grounds, but none in the main garden. I wish also, in the very middle, a fair mount, with three ascents and alleys, enough for four to walk a-breast; which I would have to be perfect circles, without any bulwarks or embossments; and the whole mount to be thirty foot high; and some fine banquetting house, with some chimneys neatly cast, and without too much glass.

For fountains, they are a great beauty and refreshment; but pools mar all, and make the garden unwholesome, and full of flies and frogs. Fountains I intend to be of two natures: the one that sprinkleth or spouteth water; the other a fair receipt of water, of some thirty or forty foot square, but without fish, or slime, or mud. For the first, the ornaments of images gilt, or of marble, which are in use, do well: but the main matter is so to convey the water, as it never stay either in the bowls, or in the cistern; that the water be never by rest discoloured, green or red, or the like; or gather any mossiness or putrefaction. Besides that, it is to be cleansed every day by the hand. Also some steps up to it, and some fine pavement about it doth well. As for the other kind of fountain, which we may call a bathing pool, it may admit much curiosity and beauty, wherewith we will not trouble ourselves; as, that the bottom be finely paved, and with images; the

sides likewise; and withal embellished with coloured glass, and such things of lustre; encompassed also with fine rails of low statues. But the main point is the same which we mentioned in the former kind of fountain; which is, that the water be in perpetual motion, fed by a water higher than the pool, and delivered into it by fair spouts, and then discharged away under ground by some equality of bores, that it stay little. And for fine devices of arching water without spilling, and making it rise in several forms, of feathers, drinking-glasses, canopies, and the like, they be pretty things to look on, but nothing to health and sweetness.

For the heath, which was the third part of our plot, I wish it to be framed as much as may be to a natural wildness. Trees I would have none in it, but some thickets made only of sweet-brier and honey-suckle, and some wild vine amongst; and the ground set with violets, strawberries, and primroses. For these are sweet and prosper in the shade. And these to be in the heath here and there, not in any order. I like also little heaps, in the nature of mole-hills, such as are in wild heaths, to be set, some with wild thyme, some with pinks, some with germander, that gives a good flower to the eye, some with periwinkle, some with violets, some with strawberries, some with cowslips, some with daisies, some with red roses, some with lilium convallium, some with sweet-williams red, some with bears-foot, and the like low flowers, being withal sweet and sightly. Part of which heaps to be with standards of little bushes, pricked upon their top, and part without. The standards to be roses, juniper, holly, berberries, but here and there, because of the smell of their blossom, red currants, gooseberries, rosemary, bays, sweet-brier, and such like. But these standards to be kept with cutting, that they grow not out of course.

For the side grounds, you are to fill them with variety of alleys, private, to give a full shade, some of them, wheresoever the sun be. You are to frame some of them likewise for shelter, that when the wind blows sharp, you may walk as in a gallery. And those alleys must be likewise hedged at both ends, to keep out the

wind; and these closer alleys must be ever finely gravelled, and no grass, because of going wet. In many of these alleys likewise, you are to set fruit-trees of all sorts; as well upon the walls as in ranges. And this would be generally observed, that the borders wherein you plant your fruit-trees, be fair and large, and low, and not steep; and set with fine flowers, but thin and sparingly, lest they deceive the trees. At the end of both the side grounds, I would have a mount of some pretty height, leaving the wall of the inclosure breast high, to look abroad into the fields.

For the main garden, I do not deny but there should be some fair alleys, ranged on both sides, with fruit-trees, and some pretty tufts of fruit-trees, and arbours with seats, set in some decent order; but these to be by no means set too thick, but to leave the main garden so as it be not close, but the air open and free. For as for shade, I would have you rest upon the alleys of the side grounds, there to walk, if you be disposed, in the heat of the year or day; but to make account, that the main garden is for the more temperate parts of the year; and in the heat of summer, for the morning and the evening, or overcast days.

For aviaries, I like them not, except they be of that largeness, as they may be turfed, and have living plants and bushes set in them; that the birds may have more scope, and natural nestling, and that no foulness appear in the floor of the aviary.

So I have made a platform of a princely garden, partly by precept, partly by drawing; not a model, but some general lines of it; and in this I have spared for no cost. But it is nothing for great princes, that for the most part, taking advice with workmen, with no less cost set their things together; and sometimes add statues, and such things, for state and magnificence, but nothing to the true pleasure of a garden.

XLVII. OF NEGOTIATING.

It is generally better to deal by speech, than by letter; and by the mediation of a third, than by a man's self. Letters are good, when a man would draw an

answer by letter back again; or when it may serve for a man's justification, afterwards to produce his own letter; or where it may be danger to be interrupted, or heard by pieces. To deal in person is good, when a man's face breedeth regard, as commonly with inferiors; or in tender cases, where a man's eye upon the countenance of him with whom he speaketh, may give him a direction how far to go: and generally where a man will reserve to himself liberty, either to disavow or to expound. In choice of instruments, it is better to choose men of a plainer sort, that are like to do that that is committed to them, and to report back again faithfully the success; than those that are cunning to contrive out of other mens business somewhat to grace themselves, and will help the matter in report, for satisfaction sake. Use also such persons as affect the business wherein they are employed, for that quickeneth much; and such as are fit for the matter; as bold men for expostulation, fair-spoken men for persuasion, crafty men for inquiry and observation, froward and absurd men for business that doth not well bear out itself. Use also such as have been lucky, and prevailed before in things wherein you have employed them; for that breeds confidence, and they will strive to maintain their prescription. It is better to sound a person with whom one deals, afar off, than to fall upon the point at first; except you mean to surprise him by some short question. It is better dealing with men in appetite, than with those that are where they would be. If a man deal with another upon conditions, the start or first performance is all; which a man cannot reasonably demand, except either the nature of the thing be such which must go before; or else a man can persuade the other party, that he shall still need him in some other thing; or else that he be counted the honester man. All practice is to discover, or to work. Men discover themselves in trust, in passion, at unawares, and of necessity, when they would have somewhat done, and cannot find an apt pretext. If you would work any man, you must either know his nature and fashions, and so lead him; or his ends, and so persuade him; or his weakness and

disadvantages, and so awe him; or those that have interest in him, and so govern him. In dealing with cunning persons, we must ever consider their ends to interpret their speeches; and it is good to say little to them, and that which they least look for. In all negotiations of difficulty, a man may not look to sow and reap at once; but must prepare business, and so ripen it by degrees.

XLVIII. OF FOLLOWERS AND FRIENDS.

Costly followers are not to be liked; lest while a man maketh his train longer, he make his wings shorter. I reckon to be costly, not them alone which charge the purse, but which are wearisome and importune in suits. Ordinary followers ought to challenge no higher conditions than countenance, recommendation, and protection from wrongs. Factious followers are worse to be liked, which follow not upon affection to him with whom they range themselves, but upon discontentment conceived against some other: whereupon commonly ensueth that ill intelligence that we many times see between great personages. Likewise glorious followers, who make themselves as trumpets of the commendation of those they follow, are full of inconvenience; for they taint business through want of secrecy; and they export honour from a man, and make him a return in envy. There is a kind of followers likewise, which are dangerous, being indeed espials; which inquire the secrets of the house, and bear tales of them to others. Yet such men many times are in great favour; for they are officious, and commonly exchange tales. The following by certain estates of men answerable to that which a great person himself professeth, as of soldiers to him that hath been employed in the wars, and the like, hath ever been a thing civil, and well taken even in monarchies; so it be without too much pomp or popularity. But the most honourable kind of following, is to be followed as one that apprehendeth to advance virtue and desert in all sorts of persons. And yet where there is no eminent odds in sufficiency, it is better to take with the more passable than with the more able.

And besides, to speak truth, in base times active men are of more use than virtuous. It is true, that in government, it is good to use men of one rank equally: for to countenance some extraordinarily, is to make them insolent, and the rest discontent; because they may claim a due. But contrariwise in favour, to use men with much difference and election is good; for it maketh the persons preferred more thankful, and the rest more officious; because all is of favour. It is good discretion not to make too much of any man at the first; because one cannot hold out that proportion. To be governed, as we call it, by one, is not safe; for it shews softness, and gives a freedom to scandal and disreputation; for those that would not censure, or speak ill of a man immediately, will talk more boldly of those that are so great with them, and thereby wound their honour. Yet to be distracted with many, is worse; for it makes men to be of the last impression, and full of change. To take advice of some few friends is ever honourable; for lookers-on many times see more than gamesters; and the vale best discovereth the hill. There is little friendship in the world, and least of all between equals, which was wont to be magnified. That that is, is between superior and inferior, whose fortunes may comprehend the one the other.

XLIX. OF SUITORS.

Many ill matters and projects are undertaken: and private suits do putrify the public good. Many good matters are undertaken with bad minds; I mean not only corrupt minds, but crafty minds, that intend not performance. Some embrace suits, which never mean to deal effectually in them; but if they see there may be life in the matter by some other mean, they will be content to win a thank, or take a second reward, or at least to make use in the mean time of the suitor's hopes. Some take hold of suits, only for an occasion to cross some other, or to make an information, whereof they could not otherwise have apt pretext; without care what become of the suit when that turn is served: or generally, to make other mens business a kind of entertainment to

bring in their own. Nay, some undertake suits, with a full purpose to let them fall; to the end to gratify the adverse party or competitor. Surely there is in some sort a right in every suit; either a right of equity, if it be a suit of controversy; or a right of desert, if it be a suit of petition. If affection lead a man to favour the wrong side in justice, let him rather use his countenance to compound the matter than to carry it. If affection lead a man to favour the less worthy in desert, let him do it without depraving or disabling the better deserver. In suits which a man doth not well understand, it is good to refer them to some friend of trust and judgment, that may report whether he may deal in them with honour; but let him choose well his referendaries, for else he may be led by the nose. Suitors are so distasted with delays and abuses, that plain dealing in denying to deal in suits at first, and reporting the success barely, and in challenging no more thanks than one hath deserved, is grown not only honourable, but also gracious. In suits of favour, the first coming ought to take little place; so far forth consideration may be had of his trust, that, if intelligence of the matter could not otherwise have been had but by him, advantage be not taken of the note, but the party left to his other means, and in some sort recompensed for his discovery. To be ignorant of the value of a suit, is simplicity; as well as to be ignorant of the right thereof, is want of conscience. Secrecy in suits is a great mean of obtaining; for voicing them to be in forwardness, may discourage some kind of suitors; but doth quicken and awake others. But timing of the suit is the principal: timing, I say, not only in respect of the person that should grant it, but in respect of those which are like to cross it. Let a man, in the choice of his mean, rather choose the fittest mean than the greatest mean: and rather them that deal in certain things than those that are general. The reparation of a denial is sometimes equal to the first grant; if a man shew himself neither dejected nor discontented. "Iniquum petas, ut æquum feras;" is a good rule, where a man hath strength of favour; but otherwise a man were better rise in his suit; for he that would have ventured at first

to have lost the suitor, will not in the conclusion lose both the suitor and his own former favour. Nothing is thought so easy a request to a great person, as his letter; and yet, if it be not in a good cause, it is so much out of his reputation. There are no worse instruments than these general contrivers of suits; for they are but a kind of poison and infection to public proceedings.

L. OF STUDIES.

Studies serve for delight, for ornament, and for ability. Their chief use for delight, is in privateness and retiring; for ornament, is in discourse; and for ability, is in the judgment and disposition of business. For expert men can execute, and perhaps judge of particulars, one by one; but the general counsels, and the plots and marshalling of affairs, come best from those that are learned. To spend too much time in studies, is sloth: to use them too much for ornament, is affectation; to make judgment only by their rules, is the humour of a scholar. They perfect nature, and are perfected by experience: for natural abilities are like natural plants, that need pruning by study; and studies themselves do give forth directions too much at large, except they be bounded in by experience. Crafty men contemn studies; simple men admire them; and wise men use them: for they teach not their own use: but that is a wisdom without them, and above them, won by observation. Read not to contradict and confute; nor to believe and take for granted; nor to find talk and discourse; but to weigh and consider. Some books are to be tasted, others to be swallowed, and some few to be chewed and digested; that is, some books are to be read only in parts; others to be read, but not curiously; and some few to be read wholly, and with diligence and attention. Some books also may be read by deputy, and extracts made of them by others; but that would be only in the less important arguments, and the meaner sort of books: else distilled books are like common distilled waters, flashy things. Reading maketh a full man; conference a ready man: and writing an exact man. And therefore if a man write little, he had need have a great memory: if he confer little, he had

need have a present wit; and if he read little, he had need have much cunning, to seem to know that he doth not. Histories make men wise; poets, witty; the mathematics, subtile; natural philosophy, deep; moral, grave; logic and rhetoric, able to contend: "Abeunt studia in mores." Nay, there is no stond or impediment in the wit, but may be wrought out by fit studies; like as diseases of the body may have appropriated exercises: bowling is good for the stone and reins; shooting for the lungs and breast; gentle walking for the stomach; riding for the head; and the like. So if a man's wit be wandering, let him study the mathematics; for in demonstrations, if his wit be called away never so little, he must begin again: if his wit be not apt to distinguish or find differences, let him study the schoolmen; for they are *cymini sectores:* if he be not apt to beat over matters, and to call up one thing to prove and illustrate another, let him study the lawyers cases: so every defect of the mind may have a special receipt.

LI. OF FACTION.

Many have an opinion not wise; that for a prince to govern his estate, or for a great person to govern his proceedings, according to the respect of factions, is a principal part of policy; whereas, contrariwise, the chiefest wisdom is, either in ordering those things which are general, and wherein men of several factions do nevertheless agree, or in dealing with correspondence to particular persons, one by one. But I say not, that the consideration of factions is to be neglected. Mean men, in their rising, must adhere; but great men, that have strength in themselves, were better to maintain themselves indifferent and neutral. Yet even in beginners, to adhere so moderately, as he be a man of the one faction, which is most passable with the other, commonly giveth best way. The lower and weaker faction is the firmer in conjunction: and it is often seen, that a few that are stiff do tire out a greater number that are more moderate. When one of the factions is extinguished, the remaining subdivideth: as the faction between Lucullus and the rest

of the nobles of the senate, which they call *optimates*, held out a while against the faction of Pompey and Cæsar: but when the senate's authority was pulled down, Cæsar and Pompey soon after brake. The faction or party of Antonius and Octavianus Cæsar, against Brutus and Cassius, held out likewise for a time: but when Brutus and Cassius were overthrown, then soon after Antonius and Octavianus brake and subdivided. These examples are of wars, but the same holdeth in private factions. And therefore those that are seconds in factions, do many times, when the faction subdivideth, prove principals: but many times also they prove cyphers and cashiered; for many a man's strength is in opposition; and when that faileth he groweth out of use. It is commonly seen, that men once placed, take in with the contrary faction to that by which they enter; thinking belike that they have the first sure, and now are ready for a new purchase. The traitor in faction lightly goeth away with it: for when matters have stuck long in balancing, the winning of some one man casteth them, and he getteth all the thanks. The even carriage between two factions, proceedeth not always of moderation, but of a trueness to a man's self, with end to make use of both. Certainly in Italy they hold it a little suspect in popes, when they have often in their mouth "Padre commune:" and take it to be a sign of one that meaneth to refer all to the greatness of his own house. Kings had need beware how they side themselves, and make themselves as of a faction or party; for leagues within the state are ever pernicious to monarchies; for they raise an obligation paramount to obligation of sovereignty, and make the king "tanquam unus ex nobis;" as was to be seen in the league of France. When factions are carried too high, and too violently, it is a sign of weakness in princes, and much to the prejudice both of their authority and business. The motions of factions under kings ought to be like the motions, as the astronomers speak, of the inferior orbs; which may have their proper motions, but yet still are quietly carried by the higher motion of primum mobile.

LII. OF CEREMONIES AND RESPECTS.

He that is only real, had need have exceeding great parts of virtue: as the stone had need to be rich that is set without foil: but if a man mark it well, it is in praise and commendation of men, as it is in gettings and gains. For the proverb is true, that light gains make heavy purses: for light gains come thick, whereas great come but now and then. So it is true, that small matters win great commendation, because they are continually in use, and in note; whereas the occasion of any great virtue cometh but on festivals: therefore it doth much add to a man's reputation, and is, as queen Isabella said, like perpetual letters commendatory, to have good forms. To attain them, it almost sufficeth not to despise them: for so shall a man observe them in others; and let him trust himself with the rest. For if he labour too much to express them, he shall lose their grace; which is to be natural and unaffected. Some mens behaviour is like a verse, wherein every syllable is measured: how can a man comprehend great matters, that breaketh his mind too much to small observations? Not to use ceremonies at all, is to teach others not to use them again, and so diminisheth respect to himself; especially they be not to be omitted to strangers and formal natures: but the dwelling upon them and exalting them above the moon, is not only tedious, but doth diminish the faith and credit of him that speaks. And certainly there is a kind of conveying of effectual and imprinting passages, amongst compliments, which is of singular use, if a man can hit upon it. Amongst a man's peers, a man shall be sure of familiarity; and therefore it is good a little to keep state. Amongst a man's inferiors one shall be sure of reverence; and therefore it is good a little to be familiar. He that is too much in any thing, so that he giveth another occasion of satiety, maketh himself cheap. To apply one's self to others is good; so it be with demonstration that a man doth it upon regard, and not upon facility. It is a good precept, generally in seconding another, yet to add somewhat of one's own; as if you will grant his opinion, let it be with some distinction; if you will

follow his motion, let it be with condition; if you allow his counsel, let it be with alledging farther reason. Men had need beware how they be too perfect in compliments; for be they never so sufficient otherwise, their enviers will be sure to give them that attribute, to the disadvantage of their greater virtues. It is loss also in business, to be too full of respects, or to be too curious in observing times and opportunities: Solomon saith, "He that considereth the wind shall not sow; and he that looketh to the clouds shall not reap." A wise man will make more opportunities than he finds. Mens behaviour should be like their apparel; not too strait or point device, but free for exercise or motion.

LIII. OF PRAISE.

Praise is the reflexion of virtue: but it is as the glass or body which giveth the reflexion. If it be from the common people, it is commonly false and nought; and rather followeth vain persons than virtuous; for the common people understand not many excellent virtues: the lowest virtues draw praise from them: the middle virtues work in them astonishment or admiration; but of the highest virtues they have no sense or perceiving at all: but shews, and *species virtutibus similes*, serve best with them. Certainly fame is like a river, that beareth up things light and swoln, and drowns things weighty and solid: but if persons of quality and judgment concur, then it is, as the Scripture saith, "Nomen bonum instar unguenti fragrantis." It filleth all round about, and will not easily away: for the odours of ointments are more durable than those of flowers. There be so many false points of praise, that a man may justly hold it a suspect. Some praises proceed merely of flattery; and if he be an ordinary flatterer, he will have certain common attributes, which may serve every man; if he be a cunning flatterer, he will follow the arch-flatterer, which is a man's self; and wherein a man thinketh best of himself, therein the flatterer will uphold him most: but if he be an impudent flatterer, look, wherein a man is conscious to himself that he is most defective, and is most out of countenance in himself,

that will the flatterer entitle him to perforce, *spreta conscientia*. Some praises come of good wishes and respects, which is a form due in civility to kings and great persons; *laudando præcipere;* when by telling men what they are, they represent to them what they should be. Some men are praised maliciously to their hurt, thereby to stir envy and jealousy towards them: *pessimum genus inimicorum laudantium;* insomuch as it was a proverb amongst the Grecians, that he that was praised to his hurt, should have a push rise upon his nose; as we say, that a blister will rise upon one's tongue that tells a lie. Certainly moderate praise, used with opportunity, and not vulgar, is that which doth the good. Solomon saith, "He that praiseth his friend aloud, rising early, it shall be to him no better than a curse." Too much magnifying of man or matter, doth irritate contradiction, and procure envy and scorn. To praise man's self cannot be decent, except it be in rare cases: but to praise a man's office or profession, he may do it with good grace, and with a kind of magnanimity. The cardinals of Rome, which are theologues, and friars, and schoolmen, have a phrase of notable contempt and scorn, towards civil business; for they call all temporal business, of wars, embassages, judicature, and other employments, *sbirrerie*, which is under-sheriffries, as if they were but matters for under-sheriffs and catchpoles; though many times those under-sheriffries do more good than their high speculations. St. Paul, when he boasts of himself, he doth oft interlace, "I speak like a fool;" but speaking of his calling, he saith, "magnificabo apostolatum meum."

LIV. OF VAIN-GLORY.

It was prettily devised of Æsop: The fly sat upon the axle-tree of the chariot-wheel, and said, What a dust do I raise? So are there some vain persons, that whatsoever goeth alone, or moveth upon greater means, if they have never so little hand in it, they think it is they that carry it. They that are glorious must needs be factious; for all bravery stands upon comparisons. They must needs be violent to make good their own

vaunts: neither can they be secret, and therefore not effectual; but according to the French proverb, "Beaucoup de bruit, peu de fruit:" Much bruit, little fruit. Yet certainly there is use of this quality in civil affairs: where there is an opinion, and fame to be created, either of virtue or greatness, these men are good trumpeters. Again, as Titus Livius noteth, in the case of Antiochus and the Ætolians, there are sometimes great effects of cross lies; as if a man that negotiates between two princes, to draw them to join in a war against the third, doth extol the forces of either of them above measure, the one to the other: and sometimes he that deals between man and man, raiseth his own credit with both, by pretending greater interest than he hath in either. And in these and the like kinds, it often falls out, that somewhat is produced of nothing; for lies are sufficient to breed opinion, and opinion brings on substance. In military commanders and soldiers, vain-glory is an essential point; for as iron sharpens iron, so by glory one courage sharpeneth another: in cases of great enterprise, upon charge and adventure, a composition of glorious natures doth put life into business; and those that are of solid and sober natures, have more of the ballast than of the sail. In fame of learning, the flight will be slow, without some feathers of ostentation: "Qui de contemnenda gloria libros scribunt, nomen suum inscribunt." Socrates, Aristotle, Galen, were men full of ostentation. Certainly vain-glory helpeth to perpetuate a man's memory; and virtue was never so beholden to human nature, as it received its due at the second hand. Neither had the fame of Cicero, Seneca, Plinius Secundus, born her age so well, if it had not been joined with some vanity in themselves: like unto varnish, that makes ceilings not only shine but last. But all this while, when I speak of vain-glory, I mean not of that property that Tacitus doth attribute to Mucianus; "omnium, quæ dixerat, feceratque, arte quadam ostentator:" for that proceeds not of vanity, but of natural magnanimity and discretion: and in some persons, is not only comely but gracious. For excusations, cessions, modesty itself well

governed, are but arts of ostentation. And amongst those arts, there is none better than that which Plinius Secundus speaketh of; which is to be liberal of praise and commendation to others, in that wherein a man's self hath any perfection. For, saith Pliny, very wittily, "in commending another you do yourself right; for he that you commend is either superior to you in that you commend, or inferior. If he be inferior, if he be to be commended, you much more. If he be superior, if he be not to be commended, you much less." Glorious men are the scorn of wise men; the admiration of fools; the idols of parasites; and slaves of their own vaunts.

LV. OF HONOUR AND REPUTATION.

The winning of honour is but the revealing of a man's virtue and worth without disadvantage. For some in their actions do woo and affect honour and reputation; which sort of men are commonly much talked of, but inwardly little admired. And some, contrariwise, darken their virtue in the shew of it; so as they be undervalued in opinion. If a man perform that which hath not been attempted before, or attempted and given over; or hath been atchieved, but not with so good circumstance: he shall purchase more honour than by effecting a matter of greater difficulty or virtue, wherein he is but a follower. If a man so temper his actions, as in some one of them he doth content every faction or combination of people, the music will be the fuller. A man is an ill husband of his honour that entereth into any action, the failing wherein may disgrace him more than the carrying of it through can honour him. Honour that is gained and broken upon another, hath the quickest reflexion, like diamonds cut with fascets. And therefore let a man contend to excel any competitors of his in honour, in out-shooting them, if he can, in their own bow. Discreet followers and servants help much to reputation: "omnis fama a domesticis emanat." Envy, which is the canker of honour, is best extinguished by declaring a man's self in his ends, rather to seek merit than fame; and by attributing a man's successes rather to divine providence and felicity, than to

his own virtue or policy. The true marshalling of the degrees of sovereign honour, are these. In the first place are Conditores Imperiorum; founders of states and commonwealths; such as were Romulus, Cyrus, Cæsar, Ottoman, Ismael. In the second place are Legislatores, lawgivers, which are also called second founders, or Perpetui Principes, because they govern by their ordinances, after they are gone: such were Lycurgus, Solon, Justinian, Edgar, Alphonsus of Castile the wise, that made the Siete partidas. In the third place are Liberatores, or Salvatores; such as compound the long miseries of civil wars, or deliver their countries from servitude of strangers or tyrants; as Augustus Cæsar, Vespasianus, Aurelianus, Theodoricus; King Henry the Seventh of England; King Henry the Fourth of France. In the fourth place are Propagatores, or Propugnatores Imperii, such as in honourable wars enlarge their territories, or make noble defence against invaders. And in the last place are Patres Patriæ, which reign justly, and make the times good wherein they live. Both which last kinds need no examples, they are in such number. Degrees of honour in subjects are; first, Participes Curarum, those upon whom princes do discharge the greatest weight of their affairs; their right hands, as we call them. The next are Duces Belli, great leaders; such as are princes lieutenants, and do them notable services in the wars. The third are Gratiosi, favourites; such as exceed not this scantling, to be solace to the sovereign, and harmless to the people: and the fourth, Negotiis Pares; such as have great places under princes, and execute their places with sufficiency. There is an honour likewise, which may be ranked amongst the greatest, which happeneth rarely: that is, of such as sacrifice themselves to death or danger for the good of their country; as was M. Regulus, and the two Decii.

LVI. OF JUDICATURE.

Judges ought to remember, that their office is *jus dicere*, and not *jus dare;* to interpret law, and not to make law, or give law. Else will it be like the authority claimed by the church of Rome; which, under

pretext of exposition of Scripture, doth not stick to add and alter; and to pronounce that which they do not find; and by shew of antiquity to introduce novelty. Judges ought to be more learned than witty; more reverend than plausible; and more advised than confident. Above all things, integrity is their portion and proper virtue. "Cursed," saith the law, "is he that removeth the land-mark." The mislayer of a mere-stone is to blame: but it is the unjust judge that is the capital remover of land-marks, when he defineth amiss of lands and property. One foul sentence doth more hurt than many foul examples. For these do but corrupt the stream: the other corrupteth the fountain. So saith Solomon; "Fons turbatus, et vena corrupta, est justus cadens in causa sua coram adersario. The office of judges may have reference unto the parties that sue; unto the advocates that plead; unto the clerks and ministers of justice underneath them; and to the sovereign or state above them.

First, for the causes or parties that sue. "There be," saith the Scripture, "that turn judgment into wormwood;" and surely there be also that turn it into vinegar: for injustice maketh it bitter, and delays make it sour. The principal duty of a judge is, to suppress force and fraud; whereof force is the more pernicious when it is open; and fraud when it is close and disguised. Add thereto contentious suits, which ought to be spewed out as the surfeit of courts. A judge ought to prepare his way to a just sentence, as God useth to prepare his way, by raising valleys and taking down hills: so when there appeareth on either side an high hand, violent prosecution, cunning advantages taken, combination, power, great counsel, then is the virtue of a judge seen, to make inequality equal; that he may plant his judgment as upon an even ground. "Qui fortiter emungit, elicit sanguinem;" and where the wine-press is hard wrought, it yields a harsh wine, that tastes of the grape-stone. Judges must beware of hard constructions and strained inferences; for there is no worse torture than the torture of laws; especially in case of laws penal they ought to have care, that that which was meant for terror be not

turned into rigour; and that they bring not upon the people that shower whereof the Scripture speaketh, "pluet super eos laqueos:" for penal laws pressed are a shower of snares upon the people. Therefore let penal laws, if they have been sleepers of long, or if they be grown unfit for the present time, be by wise judges confined in the execution; "Judicis officium est, ut res, ita tempora rerum," etc. In causes of life and death, judges ought, as far as the law permitteth, in justice to remember mercy; and to cast a severe eye upon the example, but a merciful eye upon the person.

Secondly, for the advocates and counsel that plead: patience and gravity of hearing is an essential part of justice; and an over-speaking judge is no well-tuned cymbal. It is no grace to a judge, first to find that which he might have heard in due time from the bar; or to shew quickness of conceit in cutting off evidence or counsel too short; or to prevent information by questions, though pertinent. The parts of a judge in hearing are four: to direct the evidence; to moderate length, repetition, or impertinency of speech; to recapitulate, select, and collate, the material points of that which hath been said; and to give the rule or sentence. Whatsoever is above these is too much; and proceedeth either of glory and willingness to speak, or of impatience to hear, or of shortness of memory, or of want of a stayed and equal attention. It is a strange thing to see, that the boldness of advocates should prevail with judges; whereas they should imitate God, in whose seat they sit: who "represseth the presumptuous, and giveth grace to the modest." But it is more strange that judges should have noted favourites; which cannot but cause multiplication of fees and suspicion of bye-ways. There is due from the judge to the advocate some commendation and gracing where causes are well handled, and fairly pleaded; especially towards the side which obtaineth not; for that upholds in the client the reputation of his counsel, and beats down in him the conceit of his cause. There is likewise due to the public a civil reprehension of advocates, where there appeareth cunning counsel, gross neglect, slight information, in-

discreet pressing, or an over-bold defence. And let not the counsel at the bar chop with the judge, nor wind himself into handling of the cause anew, after the judge hath declared his sentence: but on the other side, let not the judge meet the cause half way; nor give occasion to the party to say, his counsel or proofs were not heard.

Thirdly, for that that concerns clerks and ministers. The place of justice is an hallowed place; and therefore not only the bench, but the footpace, and precincts, and purprise thereof, ought to be preserved without scandal and corruption. For certainly "grapes," as the Scripture saith, "will not be gathered of thorns or thistles:" neither can justice yield her fruit with sweetness, amongst the briers and brambles of catching and polling clerks and ministers. The attendance of courts is subject to four bad instruments. First, certain persons that are sowers of suits; which make the court swell, and the country pine. The second sort is of those that engage courts in quarrels of jurisdiction, and are not truly *amici curiæ*, but *parasiti curiæ*, in puffing a court up beyond her bounds, for their own scraps and advantage. The third sort is of those that may be accounted the left hands of courts; persons that are full of nimble and sinister tricks and shifts, whereby they pervert the plain and direct courses of courts, and bring justice into oblique lines and labyrinths. And the fourth is, the poller and exacter of fees; which justifies the common resemblance of the courts of justice to the bush, whereunto while the sheep flies for defence in weather, he is sure to lose part of his fleece. On the other side, an ancient clerk, skilful in precedents, wary in proceeding, and understanding in the business of the court, is an excellent finger of a court, and doth many times point the way to the judge himself.

Fourthly, for that which may concern the sovereign and estate. Judges ought above all to remember the conclusion of the Roman twelve tables; "salus populi suprema lex;" and to know that laws, except they be in order to that end, are but things captious, and oracles not well inspired. Therefore it is an happy thing

in a state when kings and states do often consult with judges; and again, when judges do often consult with the king and state; the one, when there is matter of law intervenient in business of state; the other, when there is some consideration of state intervenient in matter of law. For many times the things deduced to judgment may be *meum* and *tuum*, when the reason and consequence thereof may trench to point of estate: I call matter of estate, not only the parts of sovereignty, but whatsoever introduceth any great alteration, or dangerous precedent; or concerneth manifestly any great portion of people. And let no man weakly conceive, that just laws and true policy have any antipathy; for they are like the spirits and sinews, that one moves with the other. Let judges also remember, that Solomon's throne was supported by lions on both sides; let them be lions, but yet lions under the throne; being circumspect that they do not check or oppose any points of sovereignty. Let not judges also be so ignorant of their own right, as to think there is not left to them, as a principal part of their office, a wise use and application of laws. For they may remember what the apostle saith of a greater law than theirs; "Nos scimus quia lex bona est, modo quis ea utatur legitime."

LVII. OF ANGER.

To seek to extinguish anger utterly, is but a bravery of the Stoics. We have better oracles: "Be angry, but sin not. Let not the sun go down upon your anger." Anger must be limited and confined, both in race and in time. We will first speak, how the natural inclination and habit, to be angry, may be attempered and calmed. Secondly, how the particular motions of anger may be repressed, or at least refrained from doing mischief. Thirdly, how to raise anger, or appease anger, in another.

For the first, there is no other way, but to meditate and ruminate well upon the effects of anger, how it troubles man's life. And the best time to do this, is to look back upon anger when the fit is throughly over. Seneca saith well; That anger is like ruin, which breaks

itself upon that it falls. The Scripture exhorteth us, "to possess our souls in patience." Whosoever is out of patience, is out of possession of his soul. Men must not turn bees:

——Animasque in vulnere ponunt.

Anger is certainly a kind of baseness; as it appears well in the weakness of those subjects in whom it reigns; children, women, old folks, sick folks. Only men must beware, that they carry their anger rather with scorn, than with fear; so that they may seem rather to be above the injury, than below it. Which is a thing easily done, if a man will give law to himself in it.

For the second point, the causes and motives of anger are chiefly three. First, to be too sensible of hurt; for no man is angry that feels not himself hurt: and therefore tender and delicate persons must needs be oft angry; they have so many things to trouble them, which more robust natures have little sense of. The next is, the apprehension and construction of the injury offered to be, in the circumstances thereof, full of contempt. For contempt is that which putteth an edge upon anger, as much or more than the hurt itself. And therefore when men are ingenious in picking out circumstances of contempt, they do kindle their anger much. Lastly, opinion of the touch of a man's reputation doth multiply and sharpen anger. Wherein the remedy is, that a man should have, as Consalvo was wont to say, "telam honoris crassiorem." But in all refrainings of anger, it is the best remedy to win time; and to make a man's self believe, that the opportunity of his revenge is not yet come: but that he foresees a time for it, and so to still himself in the mean time, and reserve it.

To contain anger from mischief, though it take hold of a man, there be two things whereof you must have special caution. The one, of extreme bitterness of words, especially if they be aculeate and proper; for *communia maledicta* are nothing so much: and again, that in anger a man reveal no secrets; for that makes them not fit for society. The other, that you do not peremptorily break off, in any business, in a fit of anger:

but howsoever you shew bitterness, do not act any thing that is not revocable.

For raising and appeasing anger in another; it is done chiefly by choosing of times. When men are frowardest and worst disposed, to incense them. Again, by gathering, as was touched before, all that you can find out to aggravate the contempt: and the two remedies are by the contraries. The former, to take good times, when first to relate to a man an angry business; for the first impression is much. And the other is, to sever, as much as may be, the construction of the injury, from the point of contempt: imputing it to misunderstanding, fear, passion, or what you will.

LVIII. OF VICISSITUDE OF THINGS.

Solomon saith, "There is no new thing upon the earth:" so that as Plato had an imagination, that all knowledge was but remembrance; so Solomon giveth his sentence, "that all novelty is but oblivion." Whereby you may see, that the river of Lethe runneth as well above ground as below. There is an abstruse astrologer, that saith, if it were not for two things that are constant (the one is, that the fixed stars ever stand at like distance one from another, and never come nearer together, nor go farther asunder: the other, that the diurnal motion perpetually keepeth time) no individual would last one moment. Certain it is, that the matter is in a perpetual flux, and never at a stay. The great winding-sheets, that bury all things in oblivion, are two: deluges, and earthquakes. As for conflagrations, and great droughts, they do merely dispeople and destroy. Phaeton's car went but a day. And the three years drought in the time of Elias, was but particular, and left people alive. As for the great burnings by lightnings, which are often in the West Indies, they are but narrow. But in the other two destructions, by deluge and earthquake, it is farther to be noted, that the remnant of people which hap to be reserved, are commonly ignorant and mountainous people, that can give no account of the time past; so that the oblivion is all one, as if none had been left. If you consider well of the

people of the West-Indies, it is very probable that they are a newer or a younger people than the people of the old world: and it is much more likely, that the destruction that hath heretofore been there, was not by earthquakes (as the Egyptian priest told Solon, concerning the island of Atlantis, that it was swallowed by an earthquake) but rather, that it was desolated by a particular deluge; for earthquakes are seldom in those parts: but, on the other side, they have such pouring rivers, as the rivers of Asia, and Africa, and Europe, are but brooks to them. Their Andes likewise, or mountains, are far higher than those with us; whereby it seems, that the remnants of generation of men were in such a particular deluge saved. As for the observation that Machiavel hath, that the jealousy of sects doth much extinguish the memory of things; traducing Gregory the Great, that he did what in him lay to extinguish all heathen antiquities; I do not find that those zeals do any great effects, nor last long; as it appeared in the succession of Sabinian, who did revive the former antiquities.

The vicissitude or mutations in the superior globe are no fit matter for this present argument. It may be, Plato's great year, if the world should last so long, would have some effect, not in renewing the state of like individuals (for that is the fume of those, that conceive the celestial bodies have more accurate influences upon these things below than indeed they have), but in gross. Comets, out of question, have likewise power and effect over the gross and mass of things: but they are rather gazed upon, and waited upon in their journey, than wisely observed in their effects; specially in their respective effects: that is, what kind of comet, for magnitude, colour, version of the beams, placing in the region of heaven, or lasting, produceth what kind of effects.

There is a toy, which I have heard, and I would not have it given over, but waited upon a little. They say it is observed in the Low Countries, I know not in what part, that every five and thirty years, the same kind and sute of years and weathers comes about again: as great

frost, great wet, great droughts, warm winters, summers with little heat, and the like; and they call it the prime. It is a thing I do the rather mention, because, computing backwards, I have found some concurrence.

But to leave these points of nature, and to come to men. The greatest vicissitude of things amongst men is the vicissitude of sects and religions: for those orbs rule in mens minds most. The true religion is built upon the rock: the rest are tossed upon the waves of time. To speak therefore of the causes of new sects, and to give some counsel concerning them, as far as the weakness of human judgment can give stay to so great revolutions:

When the religion formerly received is rent by discords; and when the holiness of the professors of religion is decayed and full of scandal: and withal the times be stupid, ignorant, and barbarous, you may doubt the springing up of a new sect; if then also there should arise any extravagant and strange spirit to make himself author thereof: all which points held when Mahomet published his law. If a new sect have not two properties, fear it not; for it will not spread. The one is the supplanting, or the opposing of authority established: for nothing is more popular than that. The other is the giving licence to pleasures and a voluptuous life. For as for speculative heresies, such as were in ancient times the Arians, and now the Arminians, though they work mightily upon mens wits, yet they do not produce any great alterations in states; except it be by the help of civil occasions. There be three manner of plantations of new sects: by the power of signs and miracles; by the eloquence and wisdom of speech and persuasion; and by the sword. For martyrdoms, I reckon them amongst miracles; because they seem to exceed the strength of human nature; and I may do the like of superlative and admirable holiness of life. Surely there is no better way to stop the rising of new sects and schisms, than to reform abuses; to compound the smaller differences; to proceed mildly, and not with sanguinary persecutions; and rather to take off the principal authors, by winning and advancing them, than to enrage them by violence and bitterness.

The changes and vicissitudes in wars are many: but chiefly in three things; in the seats or stages of the war; in the weapons; and in the manner of the conduct. Wars, in ancient time, seemed more to move from east to west: for the Persians, Assyrians, Arabians, Tartars, which were the invaders, were all eastern people. It is true, the Gauls were western; but we read but of two incursions of theirs; the one to Gallo-Græcia, the other to Rome. But east and west have no certain points of heaven; and no more have the wars, either from the east or west, any certainty of observation. But north and south are fixed: and it hath seldom or never been seen, that the far southern people have invaded the northern, but contrariwise; whereby it is manifest, that the northern tract of the world is in nature the more martial region: be it in respect of the stars of that hemisphere, or of the great continents that are upon the north; whereas the south part, for ought that is known, is almost all sea; or (which is most apparent) of the cold of the northern parts; which is that which, without aid of discipline, doth make the bodies hardest, and the courages warmest.

Upon the breaking and shivering of a great state and empire, you may be sure to have wars. For great empires, while they stand, do enervate and destroy the forces of the natives which they have subdued, resting upon their own protecting forces: and then when they fail also, all goes to ruin, and they become a prey. So was it in the decay of the Roman empire, and likewise in the empire of Almaigne, after Charles the Great, every bird taking a feather; and were not unlike to befal to Spain, if it should break. The great accessions and unions of kingdoms do likewise stir up wars. For when a state grows to an over-power, it is like a great flood, that will be sure to overflow. As it hath been seen in the states of Rome, Turkey, Spain, and others. Look, when the world hath fewest barbarous people, but such as commonly will not marry or generate, except they know means to live, as it is almost every where at this day, except Tartary, there is no danger of inundations of people: but when there be great shoals of

people, which go on to populate, without foreseeing means of life and sustentation, it is of necessity that once in an age or two they discharge a portion of their people upon other nations; which the ancient northern people were wont to do by lot; casting lots what part should stay at home, and what should seek their fortunes. When a warlike state grows soft and effeminate, they may be sure of a war. For commonly such states are grown rich in the time of their degenerating; and so the prey inviteth, and their decay in valour encourageth a war.

As for the weapons, it hardly falleth under rule and observation: yet we see, even they have returns and vicissitudes. For certain it is, that ordnance was known in the city of the Oxidraces in India; and was that which the Macedonians called thunder and lightning, and magic. And it is well known, that the use of ordnance have been in China above two thousand years. The conditions of weapons, and their improvement are, first, the fetching afar off; for that outruns the danger; as it is seen in ordnance and muskets. Secondly, the strength of the percussion; wherein likewise ordnance do exceed all arietations and ancient inventions. The third is, the commodious use of them; as that they may serve in all weathers; that the carriage may be light and manageable; and the like.

For the conduct of the war: at the first, men rested extremely upon number: they did put the wars likewise upon main force and valour, pointing days for pitched fields, and so trying it out upon a even match: and they were more ignorant in ranging and arraying their battles. After, they grew to rest upon number rather competent than vast; they grew to advantages of place, cunning diversions, and the like: and they grew more skilful in the ordering of their battles.

In the youth of a state, arms do flourish; in the middle age of a state, learning; and then both of them together for a time: in the declining age of a state, mechanical arts and merchandise. Learning hath its infancy, when it is but beginning and almost childish: then its youth, when it is luxuriant and juvenile: then

its strength of years, when it is solid and reduced: and lastly, its old age, when it waxeth dry and exhaust. But it is not good to look too long upon these turning wheels of vicissitude, lest we become giddy. As for the philology of them, that is but a circle of tales, and therefore not fit for this writing.

OF A KING.

1. A king is a mortal god on earth, unto whom the living God hath lent his own name as a great honour; but withal told him, he should die like a man, lest he should be proud and flatter himself, that God hath with his name imparted unto him his nature also.

2. Of all kind of men, God is the least beholden unto them; for he doth most for them, and they do ordinarily least for him.

3. A king that would not feel his crown too heavy for him, must wear it every day; but if he think it too light, he knoweth not of what metal it is made.

4. He must make religion the rule of government, and not to balance the scale; for he that casteth in religion only to make the scales even, his own weight is contained in those characters, "Mene, mene, tekel, upharsin," "He is found too light, his kingdom shall be taken from him."

5. And that king that holds not religion the best reason of state, is void of all piety and justice, the supporters of a king.

6. He must be able to give counsel himself, but not rely thereupon; for though happy events justify their counsels, yet it is better that the evil event of good advice be rather imputed to a subject than a sovereign.

7. He is the fountain of honour, which should not run with a waste pipe, lest the courtiers sell the water, and then, as papists say of their holy wells, it loses the virtue.

8. He is the life of the law, not only as he is *lex loquens* himself, but because he animateth the dead letter, making it active towards all his subjects *præmio et pœna*.

9. A wise king must do less in altering his laws than he may; for new government is ever dangerous. It

being true in the body politic, as in the corporal, that "omnis subita immutatio est periculosa;" and though it be for the better, yet it is not without a fearful apprehension; for he that changeth the fundamental laws of a kingdom, thinketh there is no good title to a crown, but by conquest.

10. A king that setteth to sale seats of justice, oppresseth the people; for he teacheth his judges to sell justice; and "pretio parata pretio venditur justitia."

11. Bounty and magnificence are virtues very regal, but a prodigal king is nearer a tyrant than a parsimonious; for store at home draweth not his contemplations abroad: but want supplieth itself of what is next, and many times the next way: a king herein must be wise, and know what he may justly do.

12. That king which is not feared, is not loved; and he that is well seen in his craft, must as well study to be feared as loved; yet not loved for fear, but feared for love.

13. Therefore, as he must always resemble Him whose great name he beareth, and that as in manifesting the sweet influence of his mercy on the severe stroke of his justice sometimes, so in this not to suffer a man of death to live; for besides that the land doth mourn, the restraint of justice towards sin doth more retard the affection of love, than the extent of mercy doth inflame it: and sure where love is [ill] bestowed, fear is quite lost.

14. His greatest enemies are his flatterers; for though they ever speak on his side, yet their words still make against him.

15. The love which a king oweth to a weal public, should not be restrained to any one particular; yet that his more special favour do reflect upon some worthy ones, is somewhat necessary, because there are few of that capacity.

16. He must have have a special care of five things, if he would not have his crown to be but to him *infelix felicitas.*

First, that *simulata sanctitas* be not in the Church; for that is *duplex iniquitas.*

Secondly, that *inutilis æquitas* sit not in the chancery; for that is *inepta misericordia.*

Thirdly, that *utilis iniquitas* keep not the exchequer; for that is *crudele latrocinium.*

Fourthly, that *fidelis temeritas* be not his general; for that will bring but *seram pœnitentiam.*

Fifthly, that *infidelis prudentia* be not his secretary; for that is *anguis sub viridi herba.*

To conclude; as he is of the greatest power, so he is subject to the greatest cares, made the servant of his people, or else he were without a calling at all.

He then that honoureth him not is next an atheist, wanting the fear of God in his heart.

A FRAGMENT OF AN ESSAY ON FAME.

The poets make Fame a monster. They describe her in part finely and elegantly; and in part gravely and sententiously. They say: Look, how many feathers she hath, so many eyes she hath underneath; so many tongues; so many voices; she pricks up so many ears.

This is a flourish: there follow excellent parables: as, that she gathereth strength in going; that she goeth upon the ground, and yet hideth her head in the clouds: that in the day-time she sitteth in a watch-tower, and flieth most by night: that she mingleth things done with things not done; and that she is a terror to great cities. But that which passeth all the rest is, they do recount that the Earth, mother of the giants, that made war against Jupiter, and were by him destroyed, thereupon in an anger brought forth Fame; for certain it is that rebels, figured by the giants, and seditious fames and libels, are but brothers and sisters; masculine and feminine. But now if a man can tame this monster, and bring her to feed at the hand, and govern her, and with her fly other ravening fowl, and kill them, it is somewhat worth. But we are infected with the stile of the poets. To speak now in a sad and a serious manner; there is not in all the politics a place less handled, and more worthy to be handled, than this of fame. We will therefore speak of these points: what are false fames; and what are true fames; and how they may be best discerned;

how fames may be sown and raised; how they may be spread and multiplied; and how they may be checked and laid dead. And other things concerning the nature of fame. Fame is of that force, as there is scarcely any great action wherein it hath not a great part, especially in the war. Mucianus undid Vitellius, by a fame that he scattered, that Vitellius had in purpose to remove the legions of Syria into Germany, and the legions of Germany into Syria; whereupon the legions of Syria were infinitely inflamed. Julius Cæsar took Pompey unprovided, and laid asleep his industry and preparations, by a fame that he cunningly gave out, how Cæsar's own soldiers loved him not; and being wearied with the wars, and laden with the spoils of Gaul, would forsake him as soon as he came into Italy. Livia settled all things for the succession of her son Tiberius, by continual giving out that her husband Augustus was upon recovery and amendment. And it is an usual thing with the bashaws, to conceal the death of the Great Turk from the janizaries and men of war, to save the sacking of Constantinople and other towns, as their manner is. Themistocles made Xerxes, King of Persia, post apace out of Grecia, by giving out that the Grecians had a purpose to break his bridge of ships which he had made athwart the Hellespont. There be a thousand such like examples, and the more they are, the less they need to be repeated, because a man meeteth with them every where: therefore let all wise governors have as great a watch and care over fames, as they have of the actions and designs themselves.

[THE REST WAS NOT FINISHED.]

A

COLLECTION OF APOPHTHEGMS,

NEW AND OLD.

HIS LORDSHIP'S PREFACE.

JULIUS CÆSAR did write a collection of apophthegms, as appears in an epistle of Cicero; so did Macrobius, a consular man. I need say no more for the worth of a writing of that nature. It is pity Cæsar's book is lost: for I imagine they were collected with judgment and choice; whereas that of Plutarch and Stobæus, and much more the modern ones, draw much of the dregs. Certainly they are of excellent use. They are *mucrones verborum*, pointed speeches. "The words of the wise are as goads," saith Solomon. Cicero prettily calleth them *salinas*, salt-pits, that you may extract salt out of, and sprinkle it where you will. They serve to be interlaced in continued speech. They serve to be recited upon occasion of themselves. They serve, if you take out the kernel of them, and make them your own. I have, for my recreation amongst more serious studies, collected some few of them:* therein fanning the old; not omitting any, because they are vulgar, for many vulgar ones are excellent good; nor for the meanness of the person, but because they are dull and flat; and adding many new, that otherwise would have died.

* This collection his lordship made out of his memory, without turning any book. *Rawley.*

A

COLLECTION OF APOPHTHEGMS,

NEW AND OLD.

---

1. QUEEN ELIZABETH, the morrow of her coronation, it being the custom to release prisoners at the inauguration of a prince, went to the chapel; and in the great chamber, one of her courtiers, who was well known to her, either out of his own motion, or by the instigation of a wiser man, presented her with a petition; and before a great number of courtiers, besought her with a loud voice, "That now this good time, there might be four or five principal prisoners more released: those were the four evangelists and the apostle St. Paul, who had been long shut up in an unknown tongue, as it were in prison; so as they could not converse with the common people. The Queen answered very gravely, "That it was best first to inquire of them, whether they would be released or no."

2. Queen Ann Bullen, at the time when she was led to be beheaded in the Tower, called one of the king's privy chamber to her, and said unto him, "Commend me to the king, and tell him, that he hath been ever constant in his course of advancing me: from a private gentlewoman he made me a marchioness; and from a marchioness a queen; and now, that he hath left no higher degree of earthly honour, he intends to crown my innocency with the glory of martyrdom."

3. His majesty James the first, king of Great Britain, having made unto his parliament an excellent and large declaration, concluded thus; "I have now given you a clear mirrour of my mind; use it therefore like a mirrour, and take heed how you let it fall, or how you soil it with your breath."

4. A great officer in France was in danger to have

lost his place; but his wife, by her suit and means making, made his peace; whereupon a pleasant fellow said, "That he had been crushed, but that he saved himself upon his horns."

5. His majesty said to his parliament at another time, finding there were some causeless jealousies sown amongst them; "That the king and his people, whereof the parliament is the representative body, were as husband and wife; and therefore that of all other things jealousy was between them most pernicious."

6. His majesty, when he thought his council might note in him some variety in businesses, though indeed he remained constant, would say, "That the sun many times shineth watery; but it is not the sun which causeth it, but some cloud rising betwixt us and the sun: and when that is scattered, the sun is as it was, and comes to his former brightness."

7. His majesty, in his answer to the book of the cardinal Evereux, who had in a grave argument of divinity sprinkled many witty ornaments of poesy and humanity, saith; "That these flowers were like blue, and yellow, and red flowers in the corn, which make a pleasant shew to those that look on, but they hurt the corn."

8. Sir Edward Coke being vehement against the two provincial councils of Wales, and the north, said to the king; "There was nothing there but a kind of confusion and hotch-potch of justice: one while they were a star-chamber; another while a king's-bench; another, a common-pleas; another, a commission of oyer and terminer." His majesty answered; "Why, Sir Edward Coke, they be like houses in progress, where I have not, nor can have, such distinct rooms of state, as I have here at Whitehall, or at Hampton-court."

9. The commissioners of the treasury moved the king, for the relief of his estate, to disafforest some forests of his, explaining themselves of such forests as lay out of the way, not near any of the king's houses, nor in the course of his progress; whereof he should never have use nor pleasure. "Why," saith the king, "do you think that Solomon had use and pleasure of all his three hundred concubines?"

10. His majesty, when the committees of both houses of parliament presented unto him the instrument of union of England and Scotland, was merry with them; and amongst other pleasant speeches, shewed unto them the laird of Lawreston, a Scotchman, who was the tallest and greatest man that was to be seen, and said, "Well, now we are all one, yet none of you will say, but here is one Scotchman greater than any Englishman;" which was an ambiguous speech; but it was thought he meant it of himself.

11. His majesty would say to the lords of his council, when they sat upon any great matter, and came from council in to him, "Well, you have sat, but what have you hatched?"

12. When the archduke did raise his siege from the Grave, the then secretary came to queen Elizabeth. The queen, having first intelligence thereof, said to the secretary, "Wot you what? The archduke has risen from the Grave." He answered, "What, without the trumpet of the archangel?" The queen replied, "Yes, without the sound of trumpet."

13. Queen Elizabeth was importuned much by my lord of Essex, to supply divers great offices that had been long void; the queen answered nothing to the matter; but rose up on the sudden, and said; "I am sure my office will not be long void." And yet at that time there was much speech of troubles, and divisions about the crown, to be after her decease; but they all vanished; and king James came in, in a profound peace.

14. The council did make remonstrance unto queen Elizabeth of the continual conspiracies against her life; and namely, that a man was lately taken, who stood ready in a very dangerous and suspicious manner to do the deed: and they shewed her the weapon wherewith he thought to have acted it. And therefore they advised her that she should go less abroad to take the air, weakly attended, as she used. But the queen answered; "That she had rather be dead, than put in custody."

15. The lady Paget, that was very private with queen Elizabeth, declared herself much against the match with Monsieur. After Monsieur's death, the queen took

extreme grief, at least as she made shew, and kept in within her bed-chamber and one ante-chamber for three weeks space, in token of mourning: at last she came forth into the privy-chamber, and admitted her ladies to have access unto her; and amongst the rest my lady Paget presented herself, and came to her with a smiling countenance. The queen bent her brows, and seemed to be highly displeased, and said to her, "Madam, you are not ignorant of my extreme grief, and do you come to me with a countenance of joy?" My lady Paget answered, "Alas, if it please your majesty, it is impossible for me to be absent from you three weeks, but that when I see you, I must look cheerfully." "No, no," said the queen, not forgetting her former averseness to the match, "you have some other conceit in it, tell me plainly." My lady answered, "I must obey you; it is this. I was thinking how happy your majesty was, you married not Monsieur; for seeing you take such thought for his death, being but your friend; if he had been your husband, sure it would have cost you your life."

16. Henry the Fourth of France his queen was young with child; count Soissons, that had his expectation upon the crown, when it was twice or thrice thought that the queen was with child before, said to some of his friends, "That it was but with a pillow." This had someways come to the king's ear; who kept it till such time as the queen waxed great: then he called the count of Soissons to him, and said, laying his hand upon the queen's belly; "Come, cousin, is this a pillow?"—The count of Soissons answered, "Yes, sir, it is a pillow for all France to sleep upon."

17. King Henry the Fourth of France was so punctual of his word, after it was once passed, that they called him, "The king of the faith."

18. The said king Henry the Fourth was moved by his Parliament to a war against the Protestants: he answered, "Yes, I mean it; I will make every one of you captains; you shall have companies assigned you." The parliament observing whereunto his speech tended, gave over, and deserted his motion.

19. Queen Elizabeth was wont to say, upon the com-

m'ssion of sales, " That the commissioners used her like strawberry wives, that laid two or three great strawberries at the mouth of their pot, and all the rest were little ones; so they made her two or three good prizes of the first particulars, but fell straightways."

20. Queen Elizabeth used to say of her instructions to great officers, " That they were like to garments, strait at the first putting on, but did by and by wear loose enough."

21. A great officer at court, when my lord of Essex was first in trouble; and that he and those that dealt for him would talk much of my lord's friends, and of his enemies, answered to one of them, " I will tell you, I know but one friend and one enemy my lord hath, and that one friend is the queen, and that one enemy is himself."

22. The book for deposing king Richard the Second, and the coming in of Henry the Fourth, supposed to be written by Dr. Hayward, who was committed to the Tower for it, had much incensed queen Elizabeth; and she asked Mr. Bacon, being then of her counsel learned, " Whether there were any treason contained in it?" Who intending to do him a pleasure, and to take off the queen's bitterness with a merry conceit, answered, " No, Madam, for treason I cannot deliver an opinion that there is any, but very much felony." The queen, apprehending it gladly, asked, " How? and wherein?" Mr. Bacon answered, " Because he had stolen many of his sentences and conceits out of Cornelius Tacitus."

23. Queen Elizabeth being to resolve upon a great officer, and being by some, that canvassed for others, put in some doubt of that person whom she meant to advance, called for Mr. Bacon, and told him, " She was like one with a lanthorn seeking a man;" and seemed unsatisfied in the choice she had of a man for that place. Mr. Bacon answered her, " That he had heard that in old time there was usually painted on the church walls the day of doom, and God sitting in judgment, and St. Michael by him, with a pair of balances; and the soul and the good deeds in the one balance, and the faults and the evil deeds in the other: and the soul's

balance went up far too light. Then was our lady painted with a great pair of beads, who cast them into the light balance, and brought down the scale: so, he said, place and authority, which were in her majesty's hands to give, were like our lady's beads, which though men, through any imperfections, were too light before, yet when they were cast in, made weight competent."

24. Queen Elizabeth was dilatory enough in suits, of her own nature; and the lord treasurer Burleigh being a wise man, and willing therein to feed her humour, would say to her; "Madam, you do well to let suitors stay; for I shall tell you, "bis dat, qui cito dat;" if you grant them speedily, they will come again the sooner."

25. Sir Nicholas Bacon, who was keeper of the great seal of England, when queen Elizabeth in her progress came to his house at Gorhambury, and said to him, "My lord, what a little house have you gotten!" answered her, "Madam, my house is well, but it is you that have made me too great for my house."

26. There was a conference in parliament between the lords house and the house of commons, about a bill of accountants, which came down from the lords to the commons; which bill prayed, That the lands of accountants, whereof they were seized when they entered upon their office, might be liable to their arrears to the queen. But the commons desired, That the bill might not look back to accountants that were already, but extend only to accountants hereafter. But the lord treasurer said, "Why, I pray you, if you had lost your purse by the way, would you look forwards, or would you look back? The queen hath lost her purse."

27. The lord keeper, Sir Nicholas Bacon, was asked his opinion by my lord of Leicester concerning two persons whom the queen seemed to think well of: "By my troth, my lord, said he, the one is a grave counsellor; the other is a proper young man; and so he will be as long as he lives."

28. My lord of Leicester, favourite to queen Elizabeth, was making a large chace about Cornbury-park; meaning to inclose it with posts and rails; and one day

was casting up his charge what it would come to. Mr. Goldingham, a free spoken man, stood by, and said to my lord, "Methinks your lordship goeth not the cheapest way to work." "Why, Goldingham?" said my lord. "Marry, my lord," said Goldingham, "count you but upon the posts, for the country will find you railing."

29. The lord keeper, Sir Nicholas Bacon, was asked his opinion by queen Elizabeth of one of these monopoly licences? And he answered, "Madam, will you have me speak the truth? *Licentia omnes deteriores sumus.*" We are all the worse for licences.

30. My lord of Essex, at the succour of Roan, made twenty-four knights, which at that time was a great number. Divers of those gentlemen were of weak and small means; which when queen Elizabeth heard, she said, "My lord might have done well to have built his alms-house, before he made his knights."

31. The deputies of the reformed religion, after the massacre which was at Paris upon St. Bartholomew's day, treated with the king and queen-mother, and some other of the council, for a peace. Both sides were agreed upon the articles. The question was, upon the security for the performance. After some particulars propounded and rejected, the queen mother said, "Why, is not the word of a king sufficient security?" One of the deputies answered, "No, by St. Bartholomew, Madam."

32. There was a French gentleman speaking with an English, of the law Salique; that women were excluded from inheriting the crown of France. The English said, "Yes; but that was meant of the women themselves, not of such males as claimed by women." The French gentleman said, "Where do you find that gloss?" The English answered, "I'll tell you, Sir: look on the backside of the record of the law Salique, and there you shall find it indorsed:" implying there was no such thing as the law Salique, but that it is a mere fiction.

33. A friar of France, being in an earnest dispute about the law Salique, would needs prove it by Scrip-

ture; citing that verse of the Gospel; "Lilia agri non laborant neque nent:" the lilies of the field do neither labour nor spin; applying it thus: That the flower-de-luces of France cannot descend, neither to the distaff, nor to the spade: that is, not to a woman, nor to a peasant.

34. When peace was renewed with the French in England, divers of the great counsellors were presented from the French with jewels: the lord Henry Howard, being then earl of Northampton, and a counsellor, was omitted. Whereupon the king said to him, "My lord, how happens it that you have not a jewel as well as the rest?" My lord answered, according to the fable in Æsop; "Non sum Gallus, itaque non reperi gemmam."

35. The same earl of Northampton, then lord privy seal, was asked by king James, openly at the table, where commonly he entertained the king with discourse; the king asked him upon the sudden, "My lord, have you not a desire to see Rome?" My lord privy seal answered, "Yes indeed, Sir." The king said, "And why?" My lord answered, "Because, if it please your majesty, it was the seat of the greatest monarchy, and the seminary of the bravest men of the world, whilst it was heathen: and then, secondly, because afterwards it was the see of so many holy bishops in the primitive Church, most of them martyrs." The king would not give it over, but said, "And for nothing else?" My lord answered, "Yes, if it please your majesty, for two things more: the one, to see him, who, they say, hath so great power to forgive other men their sins, to confess his own sins upon his knees before a chaplain or priest: and the other, to hear Antichrist say his creed."

36. Sir Nicholas Bacon being appointed a judge for the northern circuit, and having brought his trials that came before him to such a pass, as the passing of sentence on malefactors, he was by one of the malefactors mightily importuned for to save his life; which, when nothing that he had said did avail, he at length desired his mercy on account of kindred. "Prithee," said my lord judge, "how came that in?" "Why, if it

please you, my lord, your name is Bacon, and mine is Hog, and in all ages Hog and Bacon have been so near kindred, that they are not to be separated." "Ay, but," replied judge Bacon, "you and I cannot be kindred except you be hanged; for Hog is not Bacon until it be well hanged."

37. Two scholars and a countryman travelling upon the road, one night lodged all in one inn, and supped together, where the scholars thought to have put a trick upon the countryman, which was thus: the scholars appointed for supper two pigeons, and a fat capon, which being ready was brought up, and they having sat down, the one scholar took up one pigeon, the other scholar took the other pigeon, thinking thereby that the countryman should have sat still, until that they were ready for the carving of the capon; which he perceiving, took the capon and laid it on his trencher, and thus said, "Daintily contrived, every man a bird."

38. Jack Roberts was desired by his taylor, when the reckoning grew somewhat high, to have a bill of his hand. Roberts said, "I am content, but you must let no man know it." When the taylor brought him the bill, he tore it as in choler, and said to him, "You use me not well; you promised me that no man should know it, and here you have put in, "Be it known unto all men by these presents."

39. Sir Walter Raleigh was wont to say of the ladies of queen Elizabeth's privy-chamber and bed-chamber, "that they were like witches, they could do no hurt, but they could do no good."

40. There was a minister deprived for inconformity, who said to some of his friends, "that if they deprived him, it should cost an hundred mens lives." The party understood it, as if, being a turbulent fellow, he would have moved sedition, and complained of him; whereupon being convented and apposed upon that speech, he said his meaning was, "that if he lost his benefice, he would practise physic, and then he thought he should kill an hundred men in time."

41. Secretary Bourn's son kept a gentleman's wife in Shropshire, who lived from her husband, with him:

when he was weary of her, he caused her husband to be dealt with to take her home, and offered him five hundred pounds for reparation; the gentleman went to Sir H. Sidney to take his advice upon this offer, telling him, "that his wife promised now a new life; and, to tell him truth, five hundred pounds would come well with him; and besides, that sometimes he wanted a woman in his bed." "By my troth," said Sir Henry Sidney, "take her home, and take the money: then whereas other cuckolds wear their horns plain, you may wear yours gilt."

42. When Rabelais, the great jester of France, lay on his death-bed, and they gave him the extreme unction, a familiar friend came to him afterwards, and asked him how he did? Rabelais answered, "Even going my journey, they have greased my boots already."

43. Mr. Bromley, solicitor, giving in evidence for a deed, which was impeached to be fraudulent, was urged by the counsel on the other side with this presumption, That in two former suits, when title was made, that deed was passed over in silence, and some other conveyance stood upon. Mr. Justice Catline taking in with that side, asked the solicitor, "I pray thee, Mr. Solicitor, let me ask you a familiar question; I have two geldings in my stable; I have divers times business of importance, and still I send forth one of my geldings, and not the other; would you not think I set him aside for a jade?" "No, my lord," said Bromley, "I would think you spared him for your own saddle."

44. Thales, as he looked upon the stars, fell towards water; whereupon it was after said, "that if he had looked into the water he might have seen the stars, but looking up to the stars he could not see the water."

45. A man and his wife in bed together, she towards morning pretended herself to be ill at ease, desiring to lie on her husband's side; so the good man, to please her, came over her, making some short stay in his passage over; where she had not long lain, but desired to lie in her old place again: quoth he, "How can it be effected?" She answered, Come over me again." "I had rather," said he, "go a mile and a half about."

46. A thief being arraigned at the bar for stealing a mare, in his pleading urged many things in his own behalf, and at last nothing availing, he told the bench, the mare rather stole him, than he the mare; which in brief he thus related: That passing over several grounds about his lawful occasions, he was pursued close by a fierce mastiff dog, and so was forced to save himself by leaping over a hedge, which being of an agile body he effected; and in leaping, a mare standing on the other side of the hedge, leaped upon her back, who running furiously away with him, he could not by any means stop her, until he came to the next town, in which town the owner of the mare lived, and there was he taken, and here arraigned.

47. Master Mason of Trinity college, sent his pupil to another of the fellows, to borrow a book of him, who told him, "I am loth to lend my books out of my chamber, but if it please thy tutor to come and read upon it in my chamber, he shall as long as he will." It was winter, and some days after the same fellow sent to Mr. Mason to borrow his bellows; but Mr. Mason said to his pupil, "I am loth to lend my bellows out of my chamber, but if thy tutor would come and blow the fire in my chamber, he shall as long as he will."

48. A notorious rogue being brought to the bar, and knowing his case to be desperate, instead of pleading, he took to himself the liberty of jesting, and thus said, "I charge you in the king's name, to seize and take away that man (meaning the judge) in the red gown, for I go in danger of my life because of him."

49. In Flanders by accident a Flemish tiler fell from the top of a house upon a Spaniard, and killed him, though he escaped himself; the next of the blood prosecuted his death with great violence, and when he was offered pecuniary recompence, nothing would serve him but *lex talionis:* whereupon the judge said to him, "that if he did urge that sentence, it must be, that he should go up to the top of the house, and then fall down upon the tiler."

50. A rough-hewn seaman, being brought before a wise just-ass for some misdemeanor, was by him sent

away to prison, and being somewhat refractory after he heard his doom, insomuch as he would not stir a foot from the place where he stood, saying, " it were better to stand where he was than go to a worse place:" the justice thereupon, to shew the strength of his learning, took him by the shoulder, and said, " Thou shalt go *nogus vogus*," instead of *nolens volens*.

51. Francis the first of France used for his pleasure sometimes to go disguised: so walking one day in the company of the cardinal of Bourbon near Paris, he met with a peasant with a new pair of shoes upon his arm: so he called unto him and said; " By our lady, these be good shoes, what did they cost thee?" The peasant said, " Guess." The king said, " I think some five sols." Saith the peasant, " You have lyed; but a *carlois*." " What, villain," said the cardinal of Bourbon, " thou art dead, it is the king." The peasant replied; " The devil take him of you and me, that knew so much."

52. There was a young man in Rome that was very like Augustus Cæsar; Augustus took knowledge of him, and sent for the man, and asked him, " Was your mother ever at Rome?" He answered; " No, Sir, but my father was."

53. A physician advised his patient that had sore eyes, that he should abstain from wine; but the patient said, " I think, rather, Sir, from wine and water; for I have often marked it in blue eyes, and I have seen water come forth, but never wine."

54. A debauched seaman being brought before a justice of the peace upon the account of swearing, was by the justice commanded to deposit his fine in that behalf provided, which was two shillings; he thereupon plucking out of his pocket half a crown, asked the justice what was the rate he was to pay for cursing; the justice told him six-pence: quoth he, " Then a pox take you all for a company of knaves and fools, and there's half a crown for you, I will never stand changing of money."

55. Augustus Cæsar was invited to supper by one of his old friends, that had conversed with him in his less

fortunes, and had but ordinary entertainment; whereupon at his going away, he said, " I did not know that you and I were so familiar."

56. Agathocles, after he had taken Syracuse, the men whereof, during the siege, had in a bravery spoken of him all the villainy that might be, sold the Syracusans for slaves, and said; " Now if you use such words of me, I will tell your masters of you."

57. Dionysius the elder, when he saw his son in many things very inordinate, said to him, " Did you ever know me do such things?" His son answered, " No, but you had not a tyrant to your father." The father replied, " No, nor you, if you take these courses, will have a tyrant to your son."

58. Callisthenes, the philosopher, that followed Alexander's court, and hated the king, being asked by one, how one should become the famousest man in the world, answered, " By taking away him that is."

59. Agesilaus, when one told him there was one did excellently counterfeit a nightingale, and would have had him hear him, said; " Why I have heard the nightingale herself."

60. A great nobleman, upon the complaint of a servant of his, laid a citizen by the heels, thinking to bend him to his servant's desire; but the fellow being stubborn, the servant came to his lord, and told him, " Your lordship, I know, hath gone as far as well you may, but it works not; for yonder fellow is more perverse than before." Said my lord, " Let's forget him a while, and then he will remember himself."

61. One came to a cardinal in Rome, and told him, that he had brought his lordship a dainty white palfrey, but he fell lame by the way. Saith the cardinal to him, " I'll tell thee what thou shalt do; go to such a cardinal, and such a cardinal," naming him half a dozen cardinals, and tell them as much; and so whereas by thy horse, if he had been sound, thou couldest have pleased but one, with thy lame horse thou mayest please half a dozen."

62. A witty rogue coming into a lace-shop, said, he had occasion for some lace; choice whereof being shewed

him, he at last pitched upon one pattern, and asked them, how much they would have for so much as would reach from ear to ear, for so much he had occasion for. They told him, for so much: so some few words passing between them, he at last agreed, and told down his money for it, and began to measure on his own head, thus saying; "One ear is here, and the other is nailed to the pillory in Bristol, and I fear you have not so much of this lace by you at present as will perfect my bargain: therefore this piece of lace shall suffice at present in part of payment, and provide the rest with all expedition."

63. Iphicrates the Athenian, in a treaty that he had with the Lacedæmonians for peace, in which question was about security for observing the same, said, "The Athenians would not accept of any security, except the Lacedæmonians did yield up unto them those things, whereby it might be manifest, that they could not hurt them if they would."

64. Euripides would say of persons that were beautiful, and yet in some years, "In fairest bodies not only the spring is pleasant, but also the autumn."

65. There was a captain sent to an exploit by his general with forces that were not likely to atchieve the enterprize; the captain said to him, "Sir, appoint but half so many." "Why?" saith the general. The captain answered, "Because it is better fewer die than more."

66. There was a harbinger who had lodged a gentleman in a very ill room, who expostulated with him somewhat rudely; but the harbinger carelessly said; "You will take pleasure in it when you are out of it."

67. There is a Spanish adage, "Love without end hath no end:" meaning, that if it were begun not upon particular ends it would last.

68. A woman being suspected by her husband for dishonesty, and being by him at last pressed very hard about it, made him quick answer with many protestations, "that she knew no more of what he said than the man in the moon." Now the captain of the ship called the Moon, was the very man she so much loved.

69. Demosthenes when he fled from the battle, and that it was reproached to him, said, " that he that flies might fight again."

70. Gonsalvo would say, " The honour of a soldier ought to be of a strong web;" meaning, that it should not be so fine and curious, that every little disgrace should catch and stick in it.

71. An apprentice of London being brought before the chamberlain by his master for the sin of incontinency, even with his own mistress, the chamberlain thereupon gave him many Christian exhortations; and at last he mentioned and pressed the chastity of Joseph, when his mistress tempted him with the like crime of incontinency. " Ay, Sir," said the apprentice; " but if Joseph's mistress had been as handsome as mine is, he could not have forborn."

72. Bias gave in precept, " Love as if you should hereafter hate; and hate as if you should hereafter love."

73. Cineas was an excellent orator and statesman, and principal friend and counsellor to Pyrrhus; and falling in inward talk with him, and discerning the king's endless ambition; Pyrrhus opened himself unto him, that he intended first a war upon Italy, and hoped to atchieve it: Cineas asked him, " Sir, what will you do then?" " Then," saith he, " we will attempt Sicily." Cineas said, " Well, Sir, what then?" Said Pyrrhus, " If the gods favour us, we may conquer Africa and Carthage." " What then, Sir?" saith Cineas. " Nay, then," saith Pyrrhus, " we may take our rest, and sacrifice and feast every day, and make merry with our friends." " Alas, Sir," said Cineas, " may we not do so now without all this ado?"

74. Lamia the courtezan had all power with Demetrius king of Macedon, and by her instigations he did many unjust and cruel acts; whereupon Lysimachus said, " that it was the first time that ever he knew a whore play in a tragedy."

75. One of the Romans said to his friend, " What think you of one who was taken in the act and manner

of adultery?" The other answered, "Marry, I think he was slow at dispatch."

76. Epaminondas, when his great friend and colleague in war was suitor to him to pardon an offender, denied him; afterwards, when a concubine of his made the same suit, he granted it to her; which when Pelopidas seemed to take unkindly, he said; "Such suits are to be granted to whores, but not to personages of worth."

77. Thales being asked when a man should marry, said; "Young men not yet, old men not at all."

78. A company of scholars going together to catch conies, carried one scholar with them, which had not much more wit than he was born with; and to him they gave in charge, that if he saw any, he should be silent, for fear of scaring of them. But he no sooner espied a company of rabbits, before the rest, but he cried aloud, "Ecce multi cuniculi," which in English signifies, "Behold many conies;" which he had no sooner said, but the conies ran to their burrows: and he being checked by them for it, answered, "Who the devil would have thought that the rabbits understood Latin?"

79. A Welchman being at a sessions-house, and seeing the prisoners hold up hands at the bar, related to some of his acquaintance there, "that the judges were good fortune-tellers; for if they did but look upon their hands, they could certainly tell whether they should live or die."

80. Solon compared the people unto the sea, and orators and counsellors to the winds: for that the sea would be calm and quiet, if the winds did not trouble it.

81. Socrates was pronounced by the oracle of Delphos to be the wisest man of Greece, which he would put from himself ironically, saying, "there would be nothing in him to verify the oracle, except this; that he was not wise, and knew it; and others were not wise, and knew it not."

82. Socrates, when there was shewed him the book of Heraclitus the obscure, and was asked his opinion of it answered; "Those things which I understood

were excellent, I imagine so were those I understood not; but they require a diver of Delos."

83. Bion asked an envious man that was very sad, "what harm had befallen unto him, or what good had befallen unto another man?"

84. Stilpo the philosopher, when the people flocked about him, and that one said to him, "The people come wondering about you as if it were to see some strange beast!" "No," saith he, "it is to see a man which Diogenes sought with his lanthorn at noon-day."

85. A man being very jealous of his wife, insomuch that which way soever she went, he would be prying at her heels; and she being so grieved thereat, in plain terms told him, "that if he did not for the future leave off his proceedings in that nature, she would graft such a pair of horns upon his head, that should hinder him from coming out of any door in the house."

86. A citizen of London passing the streets very hastily, came at last where some stop was made by carts; and some gentlemen talking together, who knew him: where being in some passion that he could not suddenly pass, one of them in this wise spoke unto him; "that others had passed by, and there was room enough, only they could not tell whether their horns were so wide as his."

87. A tinker passing Cheapside with his usual tone, "Have you any work for a tinker?" an apprentice standing at a door opposite to a pillory there set up, called the tinker, with an intent to put a jest upon him, and told him, "that he should do very well if he would stop those two holes in the pillory;" to which the tinker answered, "that if he would but put in his head and ears a while in that pillory, he would bestow both brass and nails upon him to hold him in, and give him his labour into the bargain."

88. A young maid having married an old man, was observed on the day of marriage to be somewhat moody, as if she had eaten a dish of chums, which one of her bridemen observing, bid her be cheery; and told her moreover, "that an old horse would hold out as long,

and as well as a young one, in travel." To which she answered, stroking down her belly with her hand, "But not in this road, Sir."

89. There was in Oxford a cowardly fellow that was a very good archer; he was abused grossly by another, and moaned himself to Sir Walter Raleigh, then a scholar, and asked his advice, what he should do to repair the wrong had been offered him; Raleigh answered, "Why, challenge him at a match of shooting."

90. Whitehead, a grave divine, was much esteemed by queen Elizabeth, but not preferred, because he was against the government of bishops; he was of a blunt stoical nature: he came one day to the queen, and the queen happened to say to him, "I like thee the better, Whitehead, because thou livest unmarried." He answered, "In troth, Madam, I like you the worse for the same cause."

91. Dr. Laud said, "that some hypocrites and seeming mortified men, that held down their heads like bulrushes, were like the little images that they place in the very bowing of the vaults of churches, that look as if they held up the church, but are but puppets."

92. A nobleman of this nation, famously known for his mad tricks, on a time having taken physic, which he perceiving that it began well to work, called up his man to go for a chirurgeon presently, and to bring his instruments with him. The chirurgeon comes in all speed; to whom my lord related, that he found himself much addicted to women, and therefore it was his will, that the cause of it might be taken away, and therefore commanded him forthwith to prepare his instruments ready for to geld him: so the chirurgeon forthwith prepares accordingly, and my lord told him that he would not see it done, and that therefore he should do his work the back way: so, both parties being contented, my lord makes ready, and holds up his a—; and when he perceives the chirurgeon very near him, he lets fly full in his face; which made the chirurgeon step back, but coming presently on again; "Hold, hold," saith my lord, "I will better consider of it, for I see the retentive faculty is very weak at the approach of such keen instruments."

93. There was a cursed page that his master whipt naked, and when he had been whipt, would not put on his cloathes: and when his master bade him, said, "Take them you, for they are the hangman's fees."

94. There was a lady of the west country, that gave great entertainment at her house to most of the gallant gentlemen thereabouts, and amongst others Sir Walter Raleigh was one. This lady, though otherwise a stately dame, was a notable good housewife; and in the morning betimes she called to one of her maids that looked to the swine, and asked, "Are the pigs served?" Sir Walter Raleigh's chamber was fast by the lady's, so as he heard her: a little before dinner, the lady came down in great state into the great chamber, which was full of gentlemen: and as soon as Sir Walter Raleigh set eye upon her, "Madam," saith he, "are the pigs served?" The lady answered, "You know best whether you have had your breakfast."

95. There were fishermen drawing the river at Chelsea: Mr. Bacon came thither by chance in the afternoon, and offered to buy their draught: they were willing. He asked them what they would take? They asked thirty shillings. Mr. Bacon offered them ten. They refused it. Why then, saith Mr. Bacon, I will be only a looker on. They drew, and catched nothing. Saith Mr. Bacon, Are not you mad fellows now, that might have had an angel in your purse, to have made merry withal, and to have warmed you throughly, and now you must go home with nothing. Ay but, saith the fishermen, we had hope then to make a better gain of it. Saith Mr. Bacon, "Well, my master, then I will tell you, hope is a good breakfast, but it is a bad supper."

96. A lady walking with Mr. Bacon in Gray's Inn walks, asked him, Whose that piece of ground lying next under the walls was? He answered, "Theirs." Then she asked him, If those fields beyond the walks were theirs too? He answered, "Yes, Madam, those are ours, as you are ours, to look on, and no more."

97. His lordship, when he was newly made lord Keeper, was in Gray's Inn walks with Sir Walter Raleigh; one came and told him, that the earl of Exeter

was above. He continued upon occasion still walking a good while. At last when he came up, my lord of Exeter met him, and said; "My lord, I have made a great venture, to come up so high stairs, being a gouty man." His lordship answered; "Pardon me, my lord, I have made the greatest venture of all; for I have ventured upon your patience."

98. When Sir Francis Bacon was made the king's attorney, Sir Edward Coke was put up from being Lord Chief Justice of the common pleas, to be Lord Chief Justice of the king's bench; which is a place of greater honour, but of less profit; and withal was made privy counsellor. After a few days, the lord Coke meeting with the king's attorney, said unto him; Mr. Attorney, this is all your doing: It is you that have made this stir. Mr. Attorney answered; "Ah! my lord, your lordship all this while hath grown in breadth; you must needs now grow in height, or else you would be a monster."

99. One day queen Elizabeth told Mr. Bacon, that my lord of Essex, after great protestation of penitence and affection, fell in the end but upon the suit of renewing of his farm of sweet wines. He answered; "I read that in nature there be two kinds of motions or appetites in sympathy; the one as of iron to the adamant, for perfection; the other as of the vine to the stake, for sustentation; that her majesty was the one, and his suit the other."

100. Mr. Bacon, after he had been vehement in parliament against depopulation and inclosures; and that soon after the queen told him that she had referred the hearing of Mr. Mill's cause to certain counsellors and judges; and asked him how he liked of it? answered, "Oh, Madam, my mind is known; I am against all inclosures, and especially against inclosed justice."

101. When Sir Nicholas Bacon the lord keeper lived, every room in Gorhambury was served with a pipe of water from the ponds, distant about a mile off. In the life-time of Mr. Anthony Bacon, the water ceased. After whose death, his lordship coming to the inheritance, could not recover the water without infinite charge: when he was lord chancellor, he built Verulam house,

close by the pond-yard, for a place of privacy when he was called upon to dispatch any urgent business. And being asked, why he built that house there; his lordship answered, "that since he could not carry the water to his house, he would carry his house to the water."

102. When my lord president of the council came first to be lord treasurer, he complained to my lord chancellor of the troublesomeness of the place; for that the exchequer was so empty; the lord chancellor answered, "My lord, be of good cheer, for now you shall see the bottom of your business at the first."

103. When his lordship was newly advanced to the great seal, Gondomar came to visit him. My lord said; that he was to thank God and the king for that honour; but yet, so he might be rid of the burden, he could very willingly forbear the honour; and that he formerly had a desire, and the same continued with him still, to lead a private life. Gondomar answered, that he would tell him a tale of an old rat, that would needs leave the world, and acquainted the young rats that he would retire into his hole, and spend his days solitarily; and would enjoy no more comfort; and commanded them upon his high displeasure, not to offer to come in unto him. They forbore two or three days; at last, one that was more hardy than the rest, incited some of his fellows to go in with him, and he would venture to see how his father did; for he might be dead. They went in, and found the old rat sitting in the midst of a rich Parmesan cheese. So he applied the fable after his witty manner.

104. Rabelais tells a tale of one that was very fortunate in compounding differences. His son undertook the said course, but could never compound any. Whereupon he came to his father, and asked him; what art he had to reconcile differences? He answered; "he had no other but this: to watch when the two parties were much wearied, and their hearts were too great to seek reconcilement at one another's hands; then to be a means betwixt them, and upon no other terms." After which the son went home, and prospered in the same undertakings.

105. Alonso Cartilio was informed by his steward of

the greatness of his expence, being such as he could not hold out therewith. The bishop asked him, wherein it chiefly arose? His steward told him, in the multitude of his servants. The bishop bade him to make him a note of those that were necessary, and those that might be spared. Which he did. And the bishop taking occasion to read it before most of his servants, said to his steward, "Well, let these remain because I have need of them; and these other also because they have need of me."

106. Mr. Marbury the preacher would say, "that God was fain to do with wicked men, as men do with frisking jades in a pasture, that cannot take them up, till they get them at a gate. So wicked men will not be taken up till the hour of death."

107. Pope Sixtus the Fifth, who was a very poor man's son, and his father's house ill thatched, so that the sun came in in many places, would sport with his ignobility, and say, "that he was nato di casa illustre: son of an illustrious house."

108. When the king of Spain conquered Portugal, he gave special charge to his lieutenant, that the soldiers should not spoil, lest he should alienate the hearts of the people: the army also suffered much scarcity of victual. Whereupon the Spanish soldiers would afterwards say, "that they had won the king a kingdom on earth, as the kingdom of heaven used to be won: by fasting and abstaining from that which is another man's."

109. They feigned a tale of Sixtus Quintus, whom they called Size-ace, that after his death he went to hell, and the porter of hell said to him, "You have some reason to offer yourself to this place, because you were a wicked man; but yet, because you were a pope, I have order not to receive you: you have a place of your own, purgatory; you may go thither." So he went away, and sought about a great while for purgatory, and could find no such place. Upon that he took heart, and went to heaven, and knocked; and St. Peter asked, "Who was there?" He said, "Sixtus pope." Whereunto St. Peter said, "Why do you knock? you have the keys." Sixtus answered, "It is true; but it is so long since they

were given, as I doubt the wards of the lock be altered."

110. Charles, king of Sweden, a great enemy of the Jesuits, when he took any of their colleges, he would hang the old Jesuits, and put the young to his mines, saying, "that since they wrought so hard above ground, he would try how they could work under ground."

111. In chancery, at one time when the counsel of the parties set forth the boundaries of the land in question, by the plot; and the counsel of one part said, "We lie on this side, my lord;" and the counsel of the other part said, "And we lie on this side:" the lord chancellor Hatton stood up and said; "If you lie on both sides, whom will you have me to believe?"

112. Sir Edward Coke was wont to say, when a great man came to dinner to him, and gave him no knowledge of his coming, "Sir, since you sent me no word of your coming, you must dine with me; but if I had known of it in due time, I would have dined with you."

113. Pope Julius the third, when he was made pope, gave his hat unto a youth, a favourite of his, with great scandal. Whereupon, at one time, a cardinal that might be free with him, said modestly to him, "What did your holiness see in that young man, to make him cardinal?" Julius answered, "What did you see in me to make me pope?"

114. The same Julius, upon like occasion of speech, Why he should bear so great affection to the same young man? would say, "that he found by astrology that it was the youth's destiny to be a great prelate; which was impossible except himself were pope. And therefore that he did raise him, as the driver on of his own fortune."

115. Sir Thomas More had only daughters at the first, and his wife did ever pray for a boy. At last she had a boy, which being come to man's estate, proved but simple. Sir Thomas said to his wife, "Thou prayedst so long for a boy, that he will be a boy as long as he lives."

116. Sir Fulk Grevil, afterwards lord Brook, in par-

liament, when the house of commons, in a great business, stood much upon precedents, said unto them, "Why do you stand so much upon precedents? The times hereafter will be good or bad. If good, precedents will do no harm; if bad, power will make a way where it finds none."

117. Sir Thomas More on the day that he was beheaded, had a barber sent to him, because his hair was long; which was thought would make him more commiserated with the people. The barber came to him, and asked him, "Whether he would be pleased to be trimmed? "In good faith, honest fellow," saith Sir Thomas, "the king and I have a suit for my head; and till the title be cleared, I will do no cost upon it."

118. Stephen Gardiner, bishop of Winchester, a great champion of the popish religion, was wont to say of the Protestants who ground upon the Scripture, "That they were like posts, that bring truth in their letters, and lies in their mouths."

119. The former Sir Thomas More had sent him by a suitor in chancery two silver flagons. When they were presented by the gentleman's servant, he said to one of his men, "Have him to the cellar, and let him have of my best wine:" and, turning to the servant, said, "Tell thy master, if he like it, let him not spare it."

120. Michael Angelo, the famous painter, painting in the pope's chapel the portraiture of hell and damned souls, made one of the damned souls so like a cardinal that was his enemy, as every body at first sight knew it. Whereupon the cardinal complained to pope Clement, humbly praying it might be defaced. The pope said to him, "Why, you know very well, I have power to deliver a soul out of purgatory, but not out of hell."

121. There was an agent here for the Dutch, called Carroon; and when he used to move the queen for farther succours and more men, my lord Henry Howard would say, "That he agreed well with the name of Charon, ferryman of hell; for he came still for more men, to increase *regnum umbrarum*."

122. They were wont to call referring to the masters

in chancery, committing. My lord keeper Egerton, when he was master of the rolls, was wont to ask, "What the cause had done that it should be committed?"

123. They feigned a tale, principally against doctors reports in the chancery, that Sir Nicholas Bacon, when he came to heaven gate, was opposed, touching an unjust decree which had been made in the chancery. Sir Nicholas desired to see the order, whereupon the decree was drawn up; and finding it to begin, "Veneris," etc. "Why," saith he, "I was then sitting in the star-chamber; this concerns the master of the rolls; let him answer it." Soon after came the master of the rolls, Cordal, who died indeed a small time after Sir Nicholas Bacon; and he was likewise staid upon it; and looking into the order, he found, that upon the reading of a certificate of Dr. Gibson, it was ordered that his report should be decreed. And so he put it upon Dr. Gibson, and there it stuck.

124. Sir Nicholas Bacon, when a certain nimble-witted counsellor at the bar, who was forward to speak, did interrupt him often, said unto him, "There is a great difference betwixt you and me: a pain to me to speak, and a pain to you to hold your peace."

125. The same Sir Nicholas Bacon, upon bills exhibited to discover where lands lay, upon proof that they had a certain quantity of land, but could not set it forth, was wont to say; "And if you cannot find your land in the country, how will you have me find it in the chancery?"

126. Mr. Howland, in conference with a young student, arguing a case, happened to say, "I would ask you but this question." The student presently interrupted him, to give him an answer. Whereunto Mr. Howland gravely said, "Nay, though I ask you a question, yet I did not mean you should answer me; I mean to answer myself."

127. Pope Adrian the sixth was talking with the duke of Sesa, "that Pasquil gave great scandal, and that he would have him thrown into the river:" but Sesa answered, "Do it not, holy father, for then he will turn

frog; and whereas now he chants but by day, he will then chant both by day and night."

128. There was a gentleman in Italy that wrote to a great friend of his, whom the pope had newly advanced to be cardinal, that he was very glad of his advancement, for the cardinal's own sake; but he was sorry that himself had lost a good friend.

129. There was a king of Hungary took a bishop in battle, and kept him prisoner: whereupon the pope writ a monitory to him, for that he had broken the privilege of holy church, and taken his son. The king sent an embassage to him, and sent withal the armour wherein the bishop was taken, and this only in writing, "Vide num hæc sit vestis filii tui:" "know now whether this be thy son's coat."

130. Sir Amyas Pawlet, when he saw too much haste made in a matter, was wont to say, "Stay a while, that we may make an end the sooner."

131. A master of the requests to queen Elizabeth had divers times moved for audience, and been put off. At last he came to the queen in a progress, and had on a new pair of boots. The queen, who loved not the smell of new leather, said to him, "Fy, sloven, thy new boots stink." "Madam," said he, "it is not my new boots that stink; but it is the stale bills that I have kept so long."

132. At an act of the commencement, the answerer gave for his question, that an aristocracy was better than a monarchy. The replier, who was a dissolute man, did tax him, that being a private bred man, he would give a question of state. The answerer said, that the replier did much wrong the privilege of scholars, who would be much straitened if they should give questions of nothing but such things wherein they are practised: and added, "We have heard yourself dispute of virtue, which no man will say you put much in practice."

133. Queen Isabella of Spain used to say, "Whosoever hath a good presence and a good fashion, carries continual letters of recommendation."

134. Alonso of Arragon was wont to say in commendation of age, "That age appeared to be best in four

things: old wood best to burn; old wine to drink; old friends to trust; and old authors to read."

135. It was said of Augustus, and afterward the like was said of Septimius Severus, both which did infinite mischief in their beginnings, and infinite good toward their ends, "that they should either have never been born or never died."

136. Constantine the Great, in a kind of envy, himself being a great builder, as Trajan likewise was, would call Trajan *Parietaria:* wall-flower; because his name was upon so many walls.

137. Alonso of Arragon was wont to say of himself, "That he was a great necromancer, for that he used to ask counsel of the dead:" meaning of books.

138. Ethelwold, bishop of Winchester, in a famine, sold all the rich vessels and ornaments of the church, to relieve the poor with bread; and said, "there was no reason that the dead temples of God should be sumptuously furnished, and the living temples suffer penury."

139. Many men, especially such as affect gravity, have a manner after other mens speech to shake their heads. A great officer of this land would say, "It was as men shake a bottle, to see if there were any wit in their heads or no?"

140. After a great fight, there came to the camp of Consalvo the great captain, a gentleman, proudly horsed and armed. Diego de Mendoza asked the great captain, "Who is this?" Who answered, "It is Saint Ermin, who never appears but after a storm."

141. There was one that died greatly in debt: when it was reported in some company, where divers of his creditors casually were, that he was dead, one began to say, "Well, if he be gone, then he hath carried five hundred ducats of mine with him into the other world:" and another said, "And two hundred of mine;" and a third spake of great sums of his. Whereupon one that was amongst them said, "I perceive now, that though a man cannot carry any of his own with him into the next world, yet he may carry away that which is another man's."

142. Francis Carvajal, that was the great captain of the rebels of Peru, had often given the chase to Diego Centeno, a principal commander of the emperor's party: he was afterwards taken by the emperor's lieutenant Gasca, and committed to the custody of Diego Centeno, who used him with all possible courtesy; insomuch as Carvajal asked him, "I pray, Sir, who are you that use me with this courtesy?" Centeno said, "Do not you know Diego Centeno?" Carvajal answered, "Truly, Sir, I have been so used to see your back, as I knew not your face."

143. There was a merchant died that was very far in debt; his goods and household stuff were set forth to sale. A stranger would needs buy a pillow there, saying, "This pillow sure is good to sleep upon, since he could sleep that owed so many debts."

144. A lover met his lady in a close chair, she thinking to have gone unknown, he came and spake to her. She asked him, "How did you know me?" He said, "Because my wounds bleed afresh" alluding to the common tradition, that the wounds of a body slain will bleed afresh upon the approach of the murderer.

145. A gentleman brought music to his lady's window. She hated him, and had warned him often away; and when he would not desist, she threw stones at him. Whereupon a gentleman said unto him, that was in his company, "What greater honour can you have to your music, than that stones come about you, as they did to Orpheus?"

146. Coranus the Spaniard, at a table at dinner, fell into an extolling his own father, saying, "If he could have wished of God, he could not have chosen amongst men a better father." Sir Henry Savil said, "What, not Abraham?" Now Coranus was doubted to descend of a race of Jews.

147. Bresquet, jester to Francis the first of France, did keep a calendar of fools, wherewith he did use to make the king sport; telling him ever the reason why he put any one into his calendar. When Charles the fifth, emperor, upon confidence of the noble nature of Francis, passed through France, for the appeasing of the

rebellion of Gaunt, Bresquet put him into his calendar. The king asked him the cause. He answered, " Because you having suffered at the hands of Charles the greatest bitterness that ever prince did from another, nevertheless he would trust his person into your hands." " Why, Bresquet," said the king, " what wilt thou say, if thou seest him pass back in as great safety, as if he marched through the midst of Spain?" Saith Bresquet; " Why then I will put him out, and put in you."

148. Archbishop Grindall was wont to say, " that the physicians here in England were not good at the cure of particular diseases; but had only the power of the Church, to bind and loose."

149. Cosmus duke of Florence was wont to say of perfidious friends, " that we read, that we ought to forgive our enemies; but we do not read that we ought our friends."

150. A papist being opposed by a protestant, " that they had no Scripture for images," answered, " Yes; for you read that the people laid their sick in the streets, that the shadow of saint Peter might come upon them; and that a shadow was an image, and the obscurest of all images."

151. Sir Edward Dyer, a grave and wise gentleman, did much believe in Kelly the alchemist, that he did indeed the work, and did make gold; insomuch that he went into Germany, where Kelly then was, to inform himself fully thereof. After his return, he dined with my lord of Canterbury; where at that time was at the table Dr. Brown the physician. They fell in talk of Kelly. Sir Edward Dyer, turning to the archbishop, said; " I do assure your grace, that what I shall tell you is truth; I am an eye-witness thereof; and if I had not seen it, I should not have believed it. I saw Mr. Kelly put of the base metal into the crucible; and after it was set a little upon the fire, and a very small quantity of the medicine put in, and stirred with a stick of wood, it came forth in great proportion, perfect gold; to the touch, to the hammer, and to the test." My lord archbishop said; " You had need take heed what

you say, Sir Edward Dyer, for here is an infidel at the board." Sir Edward Dyer said again pleasantly, "I should have looked for an infidel sooner in any place than at your grace's table." "What say you, Dr. Brown?" said the archbishop. Dr. Brown answered, after his blunt and huddling manner; "The gentleman hath spoken enough for me." "Why," said the archbishop, what hath he said?" "Marry," saith Dr. Brown, he said, he would not have believed it, except he had seen it; and no more will I."

152. Doctor Johnson said, that in sickness there were three things that were material; the physician, the disease, and the patient: and if any two of these joined, then they get the victory; for, "Ne Hercules quidem contra duos." If the physician and the patient join, then down goes the disease; for then the patient recovers: if the physician and the disease join, that is a strong disease; and the physician mistaking the cure, then down goes the patient: if the patient and the disease join, then down goes the physician; for he is discredited.

153. Mr. Bettenham said, that virtuous men were like some herbs and spices, that give not out their sweet smell, till they be broken or crushed.

154. There was a painter became a physician: whereupon one said to him; "You have done well; for before the faults of your work were seen; but now they are unseen."

155. There was a gentleman that came to the tilt all in orange-tawny, and ran very ill. The next day he came again all in green, and ran worse. There was one of the lookers on asked another; "What is the reason that this gentleman changeth his colours?" The other answered, "Sure, because it may be reported, that the gentleman in the green ran worse than the gentleman in the orange-tawny."

156. Zelim was the first of the Ottomans that did shave his beard, whereas his predecessors wore it long. One of his bashaws asked him, Why he altered the custom of his predecessors? He answered, "Because you bashaws may not lead me by the beard, as you did them."

157. Æneas Sylvius, that was pope Pius Secundus, was wont to say; that the former popes did wisely to set the lawyers a-work to debate, whether the donation of Constantine the great to Sylvester, of St. Peter's patrimony, were good or valid in law or no? the better to skip over the matter in fact, whether there was ever any such thing at all or no.

158. The lord bishop Andrews was asked at the first coming over of the archbishop of Spalato, whether he were a protestant or no? He answered; "Truly I know not: but I think he is a detestant;" that was, of most of the opinions of Rome.

159. It was said amongst some of the grave prelates of the council of Trent, in which the school-divines bare the sway; that the school-men were like the astronomers, who, to save the phænomena, framed to their conceit eccentrics and epicycles, and a wonderful engine of orbs, though no such things were: so they, to save the practice of the church, had devised a great number of strange positions.

160. Æneas Sylvius would say, that the Christian faith and law, though it had not been confirmed by miracles, yet was worthy to be received for the honesty thereof.

161. Mr. Bacon would say, that it was in his business, as it is frequently in the ways: that the next way is commonly the foulest; and that if a man will go the fairest way, he must go somewhat about.

162. Mr. Bettenham, reader of Gray's Inn, used to say, that riches were like muck; when it lay in a heap it gave but a stench and ill odour; but when it was spread upon the ground, then it was cause of much fruit.

163. Cicero married his daughter to Dolabella, that held Cæsar's party: Pompey had married Julia, that was Cæsar's daughter. After, when Cæsar and Pompey took arms one against the other, and Pompey had passed the seas, and Cæsar possessed Italy, Cicero stayed somewhat long in Italy, but at last sailed over to join with Pompey; who when he came to him, Pompey said,

"You are welcome, but where left you your son-in-law?" Cicero answered, "With your father-in-law."

164. Vespasian and Titus his eldest son were both absent from Rome when the empire was cast upon Vespasian; Domitian his younger son was at Rome, who took upon him the affairs; and being of a turbulent spirit, made many changes; and displaced divers officers and governors of provinces, sending them successors. So when Vespasian returned to Rome, and Domitian came into his presence, Vespasian said to him; "Son, I looked when you would have sent me a successor."

165. Nero loved a beautiful youth, whom he used viciously, and called him wife: there was a senator of Rome that said secretly to his friend, "It was pity Nero's father had not such a wife."

166. Galba succeeded Nero, and his age being despised, there was much licence and confusion in Rome during his empire; whereupon a senator said in full senate; "It were better to live where nothing is lawful, than where all things are lawful."

167. Augustus Cæsar did write to Livia, who was over-sensible of some ill words that had been spoken of them both: "Let it not trouble thee, my Livia, if any man speak ill of us; for we have enough that no man can do ill unto us."

168. Chilon said, that kings, friends, and favourites, were like casting counters; that sometimes stood for one, sometimes for ten, sometimes for an hundred.

169. Theodosius, when he was pressed by a suitor, and denied him; the suitor said, "Why, Sir, you promised it." He answered; "I said it, but I did not promise it, if it be unjust."

170. The Romans, when they spake to the people, were wont to stile them, Ye Romans: when commanders in war spake to their army, they stiled them, My soldiers. There was a mutiny in Cæsar's army, and somewhat the soldiers would have had, yet they would not declare themselves in it, but only demanded a mission, or discharge; though with no intention it should be granted: but, knowing that Cæsar had at that time

great need of their service, thought by that means to wrench him to their other desires: whereupon with one cry they asked mission. Cæsar, after silence made, said; "I for my part, ye Romans." This title did actually speak them to be dismissed: which voice they had no sooner heard, but they mutinied again; and would not suffer him to go on with his speech, until he had called them by the name of his soldiers: and so with that one word he appeased the sedition.

171. Cæsar would say of Sylla, for that he did resign his dictatorship; "Sylla was ignorant of letters, he could not dictate."

172. Seneca said of Cæsar, "that he did quickly shew the sword, but never leave it off."

173. Diogenes begging, as divers philosophers then used, did beg more of a prodigal man, than of the rest which were present. Whereupon one said to him; "See your baseness, that when you find a liberal mind, you will take most of him." "No," said Diogenes, "but I mean to beg of the rest again."

174. Themistocles, when an ambassador from a mean estate did speak great matters, said to him, "Friend, thy words would require a city."

175. They would say of the duke of Guise, Henry, "that he was the greatest usurer in France, for that he had turned all his estate into obligations." Meaning, that he had sold and oppignerated all his patrimony to give large donatives to other men.

176. Cæsar Borgia, after long division between him and the lords of Romagna, fell to accord with them. In this accord there was an article, that he should not call them at any time all together in person. The meaning was, that knowing his dangerous nature, if he meant them treason, he might have opportunity to oppress them all together at once. Nevertheless, he used such fine art and fair carriage, that he won their confidence to meet all together in council at Cinigaglia; where he murdered them all. This act, when it was related unto pope Alexander, his father, by a cardinal, as a thing happy, but very perfidious; the pope said, "It

was they that broke their covenant first, in coming all together."

177. Titus Quinctius was in the council of the Achaians, what time they deliberated, whether in the war then to follow, between the Romans and king Antiochus, they should confederate themselves with the Romans, or with king Antiochus? In that council the Ætolians, who incited the Achaians against the Romans, to disable their forces, gave great words, as if the late victory the Romans had obtained against Philip king of Macedon, had been chiefly by the strength of forces of the Ætolians themselves: and on the other side the ambassador of Antiochus did extol the forces of his master; sounding what an innumerable company he brought in his army; and gave the nations strange names; as Elymæans, Caducians, and others. After both their harangues, Titus Quinctius, when he rose up, said; "It was an easy matter to perceive what it was that had joined Antiochus and the Ætolians together; that it appeared to be by the reciprocal lying of each, touching the others forces."

178. Plato was amorous of a young gentleman, whose name was Stella, that studied astronomy, and went oft in the clear nights to look upon the stars. Whereupon Plato wished himself heaven, that he might look upon Stella with a thousand eyes.

179. The Lacedæmonians were besieged by the Athenians in the port of Pyle, which was won, and some slain, and some taken. There was one said to one of them that was taken, by way of scorn, "Were they not brave men that lost their lives at the port of Pyle?" He answered, "Certainly a Persian arrow is much to be set by, if it can choose out a brave man."

180. Clodius was acquitted by a corrupt jury, that had palpably taken shares of money: before they gave up their verdict, they prayed of the senate a guard, that they might do their consciences, for that Clodius was a very seditious young nobleman. Whereupon all the world gave him for condemned. But acquitted he was. Catulus, the next day seeing some of them that had

acquitted him together, said to them; "What made you ask of us a guard? Were you afraid your money should be taken from you?"

181. At the same judgment, Cicero gave in evidence upon oath: and when the jury, which consisted of fifty-seven, had passed against his evidence, one day in the senate Cicero and Clodius being in altercation, Clodius upbraided him, and said; "The jury gave you no credit." Cicero answered, "Five and twenty gave me credit: but there were two and thirty that gave you no credit, for they had their money beforehand."

182. Sir Henry Savil was asked by my lord of Essex his opinion touching poets? He answered my lord; "that he thought them the best writers, next to them that writ prose."

183. Diogenes, having seen that the kingdom of Macedon, which before was contemptible and low, began to come aloft when he died, was asked, how he would be buried? He answered, "With my face downwards; for within a while the world will be turned upside down, and then I shall lie right."

184. Cato the elder was wont to say, that the Romans were like sheep; a man were better to drive a flock of them, than one of them.

185. When Lycurgus was to reform and alter the state of Sparta, in consultation one advised, that it should be reduced to an absolute popular equality: but Lycurgus said to him; "Sir, begin it in your own house."

186. Bion, that was an atheist, was shewed in a port city, in a temple of Neptune, many tables of pictures, of such as had in tempests made their vows to Neptune, and were saved from shipwreck: and was asked, "How say you now? Do you not acknowledge the power of the gods?" But saith he; "Ay, but where are they painted that have been drowned after their vows?"

187. Cicero was at dinner, where there was an ancient lady that spake of her own years, and said, "she was but forty years old." One that sat by Cicero rounded him in the ear, and said; "She talks of forty years old; but she is far more, out of question." Cicero

answered him again; "I must believe her, for I have heard her say so any time these ten years."

188. There was a soldier that vaunted before Julius Cæsar of the hurts he had received in his face. Julius Cæsar knowing him to be but a coward, told him; "You were best take heed next time you run away, how you look back."

189. There was a suitor to Vespasian, who, to lay his suit fairer, said it was for his brother; whereas indeed it was for a piece of money. Some about Vespasian told the emperor, to cross him, that the party his servant spoke for, was not his brother; but that he did it upon a bargain. Vespasian sent for the party interested, and asked him; "Whether his mean employed by him was his brother or no?" He durst not tell untruth to the emperor, and confessed he was not his brother. Whereupon the emperor said, "This do, fetch me the money, and you shall have your suit dispatched." Which he did. The courtier, which was the mean, solicited Vespasian soon after about his suit: "Why," saith Vespasian, "I gave it last day to a brother of mine."

190. Vespasian asked of Apollonius, what was the cause of Nero's ruin? Who answered, "Nero could tune the harp well, but in government he did always wind up the strings too high, or let them down too low."

191. Dionysius the tyrant, after he was deposed and brought to Corinth, kept a school. Many used to visit him; and amongst others, one when he came in, opened his mantle and shook his clothes; thinking to give Dionysius a gentle scorn; because it was the manner to do so for them that came in to see him while he was a tyrant. But Dionysius said to him; "I prithee do so, rather when thou goest out, that we may see thou stealest nothing away."

192. Diogenes, one terrible frosty morning, came into the market-place, and stood naked, shaking, to shew his tolerance. Many of the people came about him, pitying him: Plato passing by, and knowing he did it to be seen, said to the people as he went by; "If you pity him indeed, let him alone to himself."

193. Aristippus was earnest suitor to Dionysius for some grant, who would give no ear to his suit. Aristippus fell at his feet, and then Dionysius granted it. One that stood by said afterwards to Aristippus; "You a philosopher, and be so base as to throw yourself at the tyrant's feet to get a suit." Aristippus answered, "The fault is not mine, but the fault is in Dionysius, that carries his ears in his feet."

194. Solon, when he wept for his son's death, and one said to him, "Weeping will not help;" answered, "Alas, therefore I weep, because weeping will not help."

195. The same Solon being asked, whether he had given the Athenians the best laws? answered, "The best of those that they would have received."

196. One said to Aristippus; 'Tis a strange thing, why men should rather give to the poor, than to philosophers. He answered, "Because they think themselves may sooner come to be poor, than to be philosophers."

197. Trajan would say of the vain jealousy of princes, that seek to make away those that aspire to their succession; "that there was never king that did put to death his successor."

198. When it was represented to Alexander, to the advantage of Antipater, who was a stern and imperious man, that he only of all his lieutenants wore no purple, but kept the Macedonian habit of black; Alexander said, "Yea, but Antipater is all purple within."

199. Alexander used to say of his two friends, Craterus and Hephæstion; that Hephæstion loved Alexander, and Craterus loved the king.

200. It fell out so, that as Livia went abroad in Rome, there met her naked young men that were sporting in the streets, which Augustus went about severely to punish in them; but Livia spake for them, and said, "It was no more to chaste women than so many statues."

201. Philip of Macedon was wished to banish one for speaking ill of him. But Philip answered; "Better he speak where we are both known, than where we are both unknown."

202. Lucullus entertained Pompey in one of his

magnificent houses: Pompey said, "This is a marvellous fair and stately house for the summer: but methinks it should be very cold for winter." Lucullus answered, "Do you not think me as wise as divers fowls are, to change my habitation in the winter season?"

203. Plato entertained some of his friends at a dinner, and had in the chamber a bed, or couch, neatly and costly furnished. Diogenes came in, and got up upon the bed, and trampled it, saying, "I trample upon the pride of Plato." Plato mildly answered, "But with greater pride, Diogenes."

204. Pompey being commissioner for sending grain to Rome in time of dearth, when he came to the sea, found it very tempestuous and dangerous, insomuch as those about him advised him by no means to embark; but Pompey said, "It is of necessity that I go, not that I live."

205. Demosthenes was upbraided by Æschines, that his speeches did smell of the lamp. But Demosthenes said, "Indeed there is a great deal of difference between that which you and I do by lamp-light."

206. Demades the orator, in his age was talkative, and would eat hard: Antipater would say of him, that he was like a sacrifice, that nothing was left of it but the tongue and the paunch.

207. Themistocles, after he was banished, and had wrought himself into great favour afterwards, so that he was honoured and sumptuously served, seeing his present glory, said unto one of his friends, "If I had not been undone, I had been undone."

208. Philo Judæus saith, that the sense is like the sun; for the sun seals up the globe of heaven, and opens the globe of earth: so the sense doth obscure heavenly things, and reveals earthly things.

209. Alexander, after the battle of Granicum, had very great offers made him by Darius; consulting with his captains concerning them, Parmenio said, "Sure I would accept of these offers, if I were as Alexander." Alexander answered, "So would I, if I were as Parmenio."

210. Alexander was wont to say, he knew him-

self to be mortal, chiefly by two things; sleep, and lust.

211. Augustus Cæsar would say, that he wondered that Alexander feared he should want work, having no more worlds to conquer: as if it were not as hard a matter to keep, as to conquer.

212. Antigonus, when it was told him, that the enemy had such volleys of arrows that they did hide the sun, said, "That falls out well, for it is hot weather, and so we shall fight in the shade."

213. Cato the elder, being aged, buried his wife, and married a young woman. His son came to him, and said; "Sir, what have I offended, that you have brought a step-mother into your house?" The old man answered, "Nay, quite contrary, son: thou pleasest me so well, as I would be glad to have more such."

214. Crassus the orator had a fish which the Romans called *Muræna*, that he made very tame and fond of him; the fish died, and Crassus wept for it. One day falling in contention with Domitius in the senate, Domitius said, "Foolish Crassus, you wept for your *Muræna*." Crassus replied, "That is more than you did for both your wives."

215. Philip, Alexander's father, gave sentence against a prisoner what time he was drowsy, and seemed to give small attention. The prisoner, after sentence was pronounced, said, "I appeal." The king, somewhat stirred, said; "To whom do you appeal?" The prisoner answered, "From Philip when he gave no ear, to Philip when he shall give ear."

216. There was a philosopher that disputed with the emperor Adrian, and did it but weakly. One of his friends that stood by, afterwards said unto him, "Methinks you were not like yourself last day, in argument with the emperor; I could have answered better myself." "Why," said the philosopher, "would you have me contend with him that commands thirty legions?"

217. When Alexander passed into Asia, he gave large donatives to his captains, and other principal men of virtue; insomuch as Parmenio asked him, "Sir, what do you keep for yourself?" He answered, "Hope."

218. Vespasian set a tribute upon urine; Titus his son emboldened himself to speak to his father of it: and represented it as a thing indign and sordid. Vespasian said nothing for the time; but a while after, when it was forgotten, sent for a piece of silver out of the tribute-money; and called to his son, bidding him to smell to it; and asked him, whether he found any offence? Who said, "No." "Why so?" saith Vespasian again; "yet this comes out of urine."

219. Nerva the emperor succeeded Domitian, who had been tyrannical; and in his time many noble houses were overthrown by false accusations; the instruments whereof were chiefly Marcellus and Regulus. The emperor Nerva one night supped privately with some six or seven: amongst whom there was one that was a dangerous man; and began to take the like courses as Marcellus and Regulus had done. The emperor fell into discourse of the injustice and tyranny of the former time; and by name, of the two accusers; and said, "What should we do with them, if we had them now?" One of them that was at supper, and was a free-spoken senator, said, "Marry, they should sup with us."

220. There was one that found a great mass of money digging under ground in his grandfather's house; and being somewhat doubtful of the case, signified it to the emperor that he had found such treasure. The emperor made a rescript thus; "Use it." He writ back again, that the sum was greater than his estate or condition could use. The emperor writ a new rescript, thus: "Abuse it."

221. Julius Cæsar, as he passed by, was, by acclamation of some that stood in the way, termed King, to try how the people would take it. The people shewed great murmur and distaste at it. Cæsar, finding where the wind stood, slighted it, and said, "I am not king, but Cæsar;" as if they had mistaken his name. For *Rex* was a surname amongst the Romans, as King is with us.

222. When Crœsus, for his glory, shewed Solon his great treasures of gold, Solon said to him, "If another king come that hath better iron than you, he will be master of all this gold."

223. Aristippus being reprehended of luxury by one that was not rich, for that he gave six crowns for a small fish, answered, " Why, what would you have given?" The other said, " Some twelve pence." Aristippus said again, " And six crowns is no more with me."

224. Plato reprehended severely a young man for entering into a dissolute house. The young man said to him, " Why do you reprehend so sharply for so small a matter?" Plato replied, " But custom is no small matter."

225. Archidamus, king of Lacedæmon, having received from Philip king of Macedon, after Philip had won the victory of Chæronea upon the Athenians, proud letters, writ back to him, " That if he measured his own shadow, he would find it no longer than it was before his victory."

226. Pyrrhus, when his friends congratulated to him his victory over the Romans, under the conduct of Fabricius, but with great slaughter of his own side, said to them again, " Yes, but if we have such another victory, we are undone."

227. Plato was wont to say of his master Socrates, that he was like the apothecaries gally-pots; that had on the out-side apes, and owls, and satyrs; but within, precious drugs.

228. Alexander sent to Phocion a great present of money. Phocion said to the messenger, " Why doth the king send to me, and to none else?" The messenger answered, " Because he takes you to be the only good man in Athens." Phocion replied, " If he thinks so, pray let him suffer me to be so still."

229. At a banquet where those that were called the seven wise men of Greece were invited by the ambassador of a barbarous king, the ambassador related, that there was a neighbour mightier than his master, picked quarrels with him, by making impossible demands, otherwise threatening war; and now at that present had demanded of him, to drink up the sea. Whereunto one of the wise men said, " I would have him undertake it." " Why," saith the ambassador, " how shall he come off?" " Thus," saith the wise man;

"let that king first stop the rivers which run into the sea, which are no part of the bargain, and then your master will perform it."

230. At the same banquet, the ambassador desired the seven, and some other wise men that were at the banquet, to deliver every one of them some sentence or parable, that he might report to his king the wisdom of Græcia, which they did; only one was silent; which the ambassador perceiving, said to him, "Sir, let it not displease you; why do not you say somewhat that I may report?" He answered, "Report to your lord, that there are of the Grecians that can hold their peace."

231. The Lacedæmonians had in custom to speak very short, which being an empire, they might do at pleasure: but after their defeat at Leuctra, in an assembly of the Grecians, they made a long invective against Epaminondas; who stood up, and said no more than this; "I am glad we have brought you to speak long."

232. Fabius Maximus being resolved to draw the war in length, still waited upon Hannibal's progress to curb him; and for that purpose he encamped upon the high ground: but Terentius his colleague fought with Hannibal, and was in great peril of overthrow; but then Fabius came down from the high grounds, and got the day. Whereupon Hannibal said, "that he did ever think that that same cloud that hanged upon the hills, would at one time or other give a tempest."

233. Hanno the Carthaginian was sent commissioner by the state, after the second Carthaginian war, to supplicate for peace, and in the end obtained it: yet one of the sharper senators said, "You have often broken with us the peaces whereunto you have been sworn; I pray, by what god will you swear?" Hanno answered; "By the same gods that have punished the former perjury so severely."

234. Cæsar, when he first possessed Rome, Pompey being fled, offered to enter the sacred treasury to take the moneys that were there stored; and Metellus, tribune of the people, did forbid him: and when Metellus was violent in it, and would not desist, Cæsar turned to him, and said; "Presume no farther, or I will lay you dead."

And when Metellus was with those words somewhat astonished, Cæsar added; "Young man, it had been easier for me to do this than to speak it."

235. Caius Marius was general of the Romans against the Cimbers, who came with such a sea of people upon Italy. In the fight there was a band of the Cadurcians of a thousand, that did notable service; whereupon, after the fight, Marius did denison them all for citizens of Rome, though there was no law to warrant it. One of his friends did present it unto him, that he had transgressed the law, because that privilege was not to be granted but by the people. Whereunto Marius answered; "That for the noise of arms he could not hear the laws."

236. Pompey did consummate the war against Sertorius, when Metellus had brought the enemy somewhat low. He did also consummate the war against the fugitives, whom Crassus had before defeated in a great battle. So when Lucullus had had great and glorious victories against Mithridates and Tigranes; yet Pompey, by means his friends made, was sent to put an end to that war. Whereupon Lucullus taking indignation, as a disgrace offered to himself, said; "that Pompey was a carrion crow: when others had strucken down the bodies, then Pompey came and preyed upon them."

237. Antisthenes being asked of one what learning was most necessary for man's life? answered; "To unlearn that which is nought."

238. Alexander visited Diogenes in his tub; and when he asked him, what he would desire of him? Diogenes answered; "That you would stand a little aside, that the sun may come to me."

239. The same Diogenes, when mice came about him as he was eating, said; "I see, that even Diogenes nourisheth parasites."

240. Hiero visited by Pythagoras, asked him, "of what condition he was?" Pythagoras answered; "Sir, I know you have been at the Olympian games." "Yes," saith Hiero. "Thither," saith Pythagoras, come some to win the prizes. Some come to sell their merchandize, because it is a kind of mart of all Greece. Some come to meet their friends, and to make merry; because of

the great confluence of all sorts. Others come only to look on. I am one of them that come to look on." Meaning it, of philosophy, and the contemplative life.

241. Heraclitus the obscure said; "The dry light is the best soul:" meaning, when the faculties intellectual are in vigour, not drenched, or, as it were, blooded by the affections.

242. One of the philosophers was asked; "what a wise man differed from a fool?" He answered, "Send them both naked to those that know them not, and you shall perceive."

243. There was a law made by the Romans against the bribery and extortion of the governors of provinces. Cicero saith in a speech of his to the people, "that he thought the provinces would petition to the state of Rome to have that law repealed. For," saith he, "before the governors did bribe and extort as much as was sufficient for themselves: but now they bribe and extort as much as may be enough not only for themselves, but for the judges, and jurors, and magistrates."

244. Aristippus sailing in a tempest, shewed signs of fear. One of the seamen said to him, in an insulting manner: "We that are plebeians are not troubled; you that are a philosopher are afraid." Aristippus answered; "That there is not the like wager upon it, for you to perish and for me."

245. There was an orator that defended a cause of Aristippus, and prevailed. Afterwards he asked Aristippus; "Now, in your distress, what did Socrates do you good?" Aristippus answered; "Thus, in making that which you said of me to be true."

246. There was an Epicurean vaunted, that divers of other sects of philosophers did after turn Epicureans; but there never were any Epicureans that turned to any other sect. Whereupon a philosopher that was of another sect, said; "The reason was plain, for that cocks may be made capons, but capons could never be made cocks."

247. Chilon would say, "That gold was tried with the touchstone, and men with gold."

248. Simonides being asked of Hiero "what he thought of God? asked a seven-night's time to con-

sider of it: and at the seven-night's end, he asked a fortnight's time; at the fortnight's end, a month. At which Hiero marvelling, Simonides answered; "that the longer he thought upon the matter, the more difficult he found it."

249. A Spaniard was censuring to a French gentleman the want of devotion amongst the French; in that, whereas in Spain, when the sacrament goes to the sick, any that meets with it, turns back and waits upon it to the house whither it goes; but in France they only do reverence, and pass by. But the French gentleman answered him, "There is reason for it; for here with us, Christ is secure amongst his friends; but in Spain there be so many Jews and Moranos, that it is not amiss for him to have a convoy."

250. Mr. Popham, afterwards lord chief justice Popham, when he was speaker, and the house of commons had set long, and done in effect nothing; coming one day to queen Elizabeth, she said to him; "Now, Mr. Speaker, what hath passed in the commons house?" He answered, "If it please your majesty, seven weeks."

251. Themistocles in his lower fortune was in love with a young gentleman who scorned him; but when he grew to his greatness, which was soon after, he sought him: Themistocles said, "We are both grown wise, but too late."

252. Bion was sailing, and there fell out a great tempest; and the mariners, that were wicked and dissolute fellows, called upon the gods; but Bion said to them, "Peace, let them not know you are here."

253. The Turks made an expedition into Persia; and because of the strait jaws of the mountains of Armenia, the bashaws consulted which way they should get in. One that heard the debate said, "Here is much ado how you shall get in; but I hear no body take care how you should get out."

254. Philip king of Macedon maintained arguments with a musician in points of his art, somewhat peremptorily; but the musician said to him, "God forbid, Sir, your fortune were so hard, that you should know these things better than myself."

255. Antalcidas, when an Athenian said to him, "Ye Spartans are unlearned;" said again, "True, for we have learned no evil nor vice of you."

256. Pace, the bitter fool, was not suffered to come at queen Elizabeth, because of his bitter humour. Yet at one time, some persuaded the queen that he should come to her; undertaking for him, that he should keep within compass: so he was brought to her, and the queen said; "Come on, Pace; now we shall hear of our faults." Saith Pace; "I do not use to talk of that that all the town talks of."

257. Bishop Latimer said, in a sermon at court, "That he heard great speech that the king was poor; and many ways were propounded to make him rich: for his part he had thought of one way, which was, that they should help the king to some good office, for all his officers were rich."

258. After the defeat of Cyrus the younger, Falinus was sent by the king to the Grecians, who had for their part rather victory than otherwise, to command them to yield their arms: which when it was denied, Falinus said to Clearchus; "Well then, the king lets you know, that if you remove from the place where you are now encamped, it is war: if you stay, it is truce. What shall I say you will do?" Clearchus answered, "It pleaseth us, as it pleaseth the king." "How is that?" saith Falinus. Saith Clearchus, "If we remove, war: if we stay, truce:" and so would not disclose his purpose.

259. Alcibiades came to Pericles, and stayed a while ere he was admitted. When he came in, Pericles civilly excused it, and said: "I was studying how to give mine account." But Alcibiades said to him, "If you will be ruled by me, study rather how to give no account."

260. Mendoza that was vice-roy of Peru, was wont to say, "That the government of Peru was the best place that the king of Spain gave, save that it was somewhat too near Madrid."

261. When Vespasian passed from Jewry to take upon him the empire, he went by Alexandria, where re-

mained two famous philosophers, Apollonius and Euphrates. The emperor heard the discourse, touching matter of state, in the presence of many. And when he was weary of them, he brake off, and in a secret derision, finding their discourses but speculative, and not to be put in practice, said; "O that I might govern wise men, and wise men govern me."

262. Cardinal Ximenes, upon a muster, which was taken against the Moors, was spoken to by a servant of his to stand a little out of the smoke of the harquebuss; but he said again, "that that was his incense."

263. Nero was wont to say of his master Seneca, "That his stile was like mortar without lime."

264. Augustus Cæsar, out of great indignation against his two daughters, and Posthumus Agrippa, his grandchild; whereof the two first were infamous, and the last otherwise unworthy; would say, "That they were not his seed, but some imposthumes that had broken from him."

265. A seaman coming before the judges of the admiralty for admittance into an office of a ship bound for the Indies, was by one of the judges much slighted, as an insufficient person for that office he sought to obtain; the judge telling him, "that he believed he could not say the points of his compass." The seaman answered; "that he could say them, under favour, better than he could say his *Pater-noster*." The judge replied; "that he would wager twenty shillings with him upon that." The seaman taking him up, it came to trial: and the seaman began, and said all the points of his compass very exactly: the judge likewise said his *Pater-noster:* and when he had finished it, he required the wager according to agreement; because the seaman was to say his compass better than he his *Pater-noster*, which he had not performed. "Nay, I pray, Sir, hold," quoth the seaman, "the wager is not finished; for I have but half done:" and so he immediately said his compass backward very exactly; which the judge failing of in his *Pater-noster*, the seaman carried away the prize.

266. There was a conspiracy, against the emperor Claudius by Scribonianus, examined in the senate;

where Claudius sat in his chair, and one of his freed servants stood at the back of his chair. In the examination, that freed servant, who had much power with Claudius, very saucily, had almost all the words: and amongst other things, he asked in scorn one of the examinates, who was likewise a freed servant of Scribonianus; "I pray, Sir, if Scribonianus had been emperor, what would you have done?" He answered; "I would have stood behind his chair and held my peace."

267. One was saying that his great grandfather, and grandfather, and father, died at sea: said another that heard him, "And I were as you, I would never come at sea." "Why," saith he, "where did your great grandfather, and grandfather, and father die?" He answered; "Where but in their beds?" He answered; "And I were as you, I would never come in bed."

268. There was a dispute, whether great heads or little heads had the better wit? And one said, "It must needs be the little; for that it is a maxim, "Omne majus continet in se minus."

269. Sir Thomas More, when the counsel of the party pressed him for a longer day to perform the decree, said; "Take saint Barnaby's day, which is the longest day in the year." Now saint Barnaby's day was within few days following.

270. One of the fathers saith, "That there is but this difference between the death of old men and young men; that old men go to death, and death comes to young men."

271. Cassius, after the defeat of Crassus by the Parthians, whose weapons were chiefly arrows, fled to the city of Charras, where he durst not stay any time, doubting to be pursued and besieged; he had with him an astrologer, who said to him, "Sir, I would not have you go hence, while the moon is in the sign of Scorpio." Cassius answered, "I am more afraid of that of Sagittarius."

272. Jason the Thessalian was wont to say, "that some things must be done unjustly, that many things may be done justly."

273. Demetrius king of Macedon would at times retire

himself from business, and give himself wholly to pleasures. One of those his retirings, giving out that he was sick, his father Antigonus came on the sudden to visit him; and met a fair dainty youth coming out of his chamber. When Antigonus came in, Demetrius said; "Sir, the fever left me right now." Antigonus replied, "I think it was he that I met at the door."

274. Cato Major would say, "That wise men learned more by fools, than fools by wise men."

275. When it was said to Anaxagoras; "The Athenians have condemned you to die;" he said again, "And nature them."

276. Alexander, when his father wished him to run for the prize of the race at the Olympian games, for he was very swift, answered; "He would, if he might run with kings."

277. Antigonus used often to go disguised, and to listen at the tents of his soldiers; and at a time heard some that spoke very ill of him. Whereupon he opened the tent a little, and said to them; "If you would speak ill of me, you should go a little farther off."

278. Aristippus said: "That those that studied particular sciences, and neglected philosophy, were like Penelope's wooers, that made love to the waiting woman."

279. The ambassadors of Asia Minor came to Antonius, after he had imposed upon them a double tax, and said plainly to him; "That if he would have two tributes in one year, he must give them two seed-times and two harvests."

280. An orator of Athens said to Demosthenes; "The Athenians will kill you if they wax mad." Demosthenes replied, "And they will kill you if they be in good sense."

281. Epictetus used to say; "That one of the vulgar, in any ill that happens to him, blames others; a novice in philosophy blames himself; and a philosopher blames neither the one nor the other."

282. Cæsar, in his book that he made against Cato, which is lost, did write, to shew the force of opinion and reverence of a man that had once obtained a popular

reputation; "There were some that found Cato drunk, and were ashamed instead of Cato."

283. There was a nobleman said of a great counsellor, "that he would have made the worst farrier in the world; for he never shod horse but he cloyed him: for he never commended any man to the king for service, or upon occasion of suit, or otherwise, but that he would come in, in the end, with a *but*, and drive in a nail to his disadvantage."

284. Diogenes called an ill physician, Cock. "Why?" saith he. Diogenes answered; "Because when you crow, men use to rise."

285. There was a gentleman fell very sick, and a friend of his said to him; "Surely, you are in danger; I pray send for a physician." But the sick man answered; "It is no matter, for if I die, I will die at leisure."

286. Cato the elder, what time many of the Romans had statues erected in their honour, was asked by one in a kind of wonder, "Why he had none?" He answered, "He had much rather men should ask and wonder why he had no statue, than why he had a statue."

287. A certain friend of Sir Thomas More's, taking great pains about a book, which he intended to publish, being well conceited of his own wit, which no man else thought worthy of commendation, brought it to Sir Thomas More to peruse it, and pass his judgment upon it; which he did: and finding nothing therein worthy the press, he said to him with a grave countenance; "That if it were in verse it would be more worthy." Upon which words, he went immediately and turned it into verse, and then brought it to Sir Thomas again; who looking thereon, said soberly; "Yes, marry, now it is somewhat, for now it is rhime; whereas before it was neither rhime nor reason."

288. Sir Henry Wotton used to say, "That critics were like brushers of noblemens clothes."

289. Hannibal said of Fabius Maximus, and of Marcellus, whereof the former waited upon him, that he could make no progress, and the latter had many sharp

fights with him; "that he feared Fabius like a tutor, and Marcellus like an enemy."

290. When king Edward the second was amongst his torturers, who hurried him to and fro, that no man should know where he was, they set him down upon a bank: and one time, the more to disguise his face, shaved him, and washed him with cold water of a ditch by: the king said; "Well, yet I will have warm water for my beard:" and so shed abundance of tears.

291. One of the Seven was wont to say; "That laws were like cobwebs; where the small flies were caught, and the great brake through."

292. Lewis the eleventh of France, having much abated the greatness and power of the peers, nobility, and court of parliament, would say, "That he had brought the crown out of ward."

293. There was a cowardly Spanish soldier, that in a defeat the Moors gave, ran away with the foremost. Afterwards, when the army generally fled, the soldier was missing. Whereupon it was said by some, that he was slain. "No sure," said one, "he is alive; for the Moors eat no hares flesh."

294. A gentleman that was punctual of his word, and loved the same in others, when he heard that two persons had agreed upon a meeting about serious affairs, at a certain time and place; and that the one party failed in the performance, or neglected his hour; would usually say of him, "He is a young man then."

295. Anacharsis would say, concerning the popular estates of Græcia, that "he wondered how at Athens wise men did propose, and fools dispose."

His lordship, when he had finished this collection of Apophthegms, concluded thus: Come, now all is well: they say, he is not a wise man that will lose his friend for his wit; but he is less a wise man that will lose his friend for another man's wit.

APOPHTHEGMS,

Contained in the original edition in octavo, but omitted in later copies.

1. When queen Elizabeth had advanced Raleigh, she was one day playing on the virginals, and my lord of Oxford and another nobleman stood by. It fell out so, that the ledge before the jacks was taken away, so as the jacks were seen: my lord of Oxford and the other nobleman smiled, and a little whispered. The queen marked it, and would needs know what the matter was? My lord of Oxford answered; "That they smiled to see that when jacks went up, heads went down."

22. Sir Thomas More, who was a man, in all his life-time, that had an excellent vein in jesting, at the very instant of his death, having a pretty long beard, after his head was upon the block, lift it up again, and gently drew his beard aside, and said; "This hath not offended the king."

27. Demonax the philosopher, when he died, was asked touching his burial. He answered, "Never take care for burying me, for stink will bury me." He that asked him, said again; "Why, would you have your body left to the dogs and ravens to feed upon?" Demonax answered; "Why, what great hurt is it, if having sought to do good, when I lived, to men; my body do some good to beasts, when I am dead."

30. Phocion the Athenian, a man of great severity, and no ways flexible to the will of the people, one day, when he spake to the people, in one part of his speech, was applauded: whereupon he turned to one of his friends, and asked, "What have I said amiss?"

34. Bion was wont to say; "That Socrates, of all the lovers of Alcibiades, only held him by the ears."

37. There was a philosopher about Tiberius, that looking into the nature of Caius, said of him; "that he was mire mingled with blood."

42. There was a bishop that was somewhat a delicate person, and bathed twice a day. A friend of his said to him; "My lord, why do you bathe twice a day?" The

bishop answered; "Because I cannot conveniently bathe thrice."

89. When Sir Thomas More was lord chancellor, he did use, at mass, to sit in the chancel; and his lady in a pew. And because the pew stood out of sight, his gentleman-usher, ever after service, came to the lady's pew, and said, "Madam, my lord is gone." So when the chancellor's place was taken from him, the next time they went to church, Sir Thomas himself came to his lady's pew, and said; "Madam, my lord is gone."

104. A Grecian captain advising the confederates that were united against the Lacedæmonians, touching their enterprise, gave opinion, that they should go directly upon Sparta, saying; "That the state of Sparta was like rivers; strong when they had run a great way, and weak towards their head."

108. One was examined upon certain scandalous words spoken against the king. He confessed them, and said; "It is true, I spake them, and if the wine had not failed, I had said much more."

110. Trajan would say, "That the king's exchequer was like the spleen; for when that did swell, the whole body did pine."

111. Charles the Bald allowed one, whose name was Scottus, to sit at the table with him, for his pleasure: Scottus sat on the other side of the table. One time the king being merry with him, said to him; "What is there between Scott and sot?" Scottus answered: "The table only."

113. There was a marriage between a widow of great wealth, and a gentleman of a great house, that had no estate or means. Jack Roberts said, "That marriage was like a black pudding; the one brought blood, and the other brought suet and oatmeal."

149. Crœsus said to Cambyses, "That peace was better than war; because in peace the sons did bury their fathers, but in the wars the fathers did bury their sons."

154. Carvajal, when he was drawn to execution, be-

ing fourscore and five years old, and laid upon the hurdle, said, "What! young in cradle, old in cradle!"

161. Diogenes was asked in a kind of scorn, "What was the matter, that philosophers haunted rich men, and not rich men philosophers?" He answered, "Because the one knew what they wanted, the other did not."

162. Demetrius, king of Macedon, had a petition offered him divers times by an old woman, and still answered, "He had no leisure." Whereupon the woman said aloud, "Why then give over to be king."

175. There were two gentlemen, otherwise of equal degree, save that the one was of the ancienter house. The other in courtesy asked his hand to kiss: which he gave him; and he kissed it: but said withal, to right himself by way of friendship, "Well, I and you, against any two of them:" putting himself first.

198. Themistocles would say of himself, "That he was like a plane tree, that in tempests men fled to him, and in fair weather men were ever cropping his leaves."

199. Themistocles said of speech, "That it was like arras, that spread abroad shews fair images, but contracted is but like packs."

211. Lycurgus would say of divers of the heroes of the heathen, "That he wondered that men should mourn upon their days for them as mortal men, and yet sacrifice to them as gods."

213. There is an ecclesiastical writer of the Papists, to prove antiquity of confession in the form that it now is, doth note, in very ancient times, even in the primitive times, amongst other foul slanders spread against the Christians, one was, "That they did adore the genitories of their priests. Which, he saith, grew from the posture of the confessant, and the priest in confession: which is, that the confessant kneels down, before the priest sitting in a raised chair above him."

216. Fabricius, in conference with Pyrrhus, was tempted to revolt to him; Pyrrhus telling him, that he should be partner of his fortunes, and second person to him. But Fabricius answered, in a scorn, to such a

motion, " Sir, that would not be good for yourself: for if the Epirotes once knew me, they will rather desire to be governed by me than by you."

221. Thales said; " that life and death were all one." One that was present asked him; " Why do not you die then?" Thales said again; " Because they are all one."

223. An Ægyptian priest having conference with Solon, said to him; " You Grecians are ever children; you have no knowledge of antiquity, nor antiquity of knowledge."

227. Diogenes was one day in the market-place with a candle in his hand; and being asked, " What he sought?" he said, " He sought a man."

228. Bias being asked; How a man should order his life? answered; " As if a man should live long, or die quickly."

229. Queen Elizabeth was entertained by my lord Burleigh at Theobalds: and at her going away, my lord obtained of the queen to make seven knights. They were gentlemen of the country, of my lord's friends and neighbours. They were placed in a rank, as the queen should pass by the hall, and to win antiquity of knighthood, in order, as my lord favoured; though indeed the more principal gentlemen were placed lowest. The queen was told of it, and said nothing; but when she went along, she passed them all by, as far as the skreen, as if she had forgot it: and when she came to the skreen, she seemed to take herself with the manner, and said, " I had almost forgot what I promised." With that she turned back, and knighted the lowest first, and so upward. Whereupon Mr. Stanhope, of the privy-chamber, a while after told her: " Your majesty was too fine for my lord Burleigh." She answered; " I have but fulfilled the Scripture; " the first shall be last, and the last first."

235. Sir Fulke Grevill had much and private access to Queen Elizabeth, which he used honourably, and did many men good; yet he would say merrily of himself, " That he was like Robin Goodfellow; for when the maids spilt the milkpans, or kept any racket, they would

lay it upon Robin: so what tales the ladies about the queen told her, or other bad offices that they did, they would put it upon him."

240. There was a politic sermon, that had no divinity in it, preached before the king. The king, as he came forth, said to bishop Andrews; "Call you this a sermon?" The bishop answered, "And it please your majesty, by a charitable construction, it may be a sermon."

244. Henry Noel would say, "That courtiers were like fasting-days; they were next the holy-days, but in themselves they were the most meagre days of the week."

247. Cato said, "The best way to keep good acts in memory, was to refresh them with new."

259. Aristippus said, "He took money of his friends, not so much to use it himself, as to teach them how to bestow their money."

260. A strumpet said to Aristippus, "That she was with child by him:" he answered, "You know that no more than if you went through a hedge of thorns, you could say, This thorn pricked me."

263. Democritus said, "That truth did lie in profound pits, and when it was got, it needed much refining."

266. Diogenes said of a young man that danced daintily, and was much commended: "The better, the worse."

271. There was a nobleman that was lean of visage, but immediately after his marriage he grew pretty plump and fat. One said to him, "Your lordship doth contrary to other married men; for they at the first wax lean, and you wax fat." Sir Walter Raleigh stood by, and said; "Why, there is no beast, that if you take him from the common, and put him into the several, but he will wax fat."

272. Diogenes seeing one, that was a bastard, casting stones among the people, bad him "take heed that he hit not his father."

275. It was said by many concerning the canons of the council of Trent, "That we are beholden to Aristotle for many articles of our faith."

CERTAIN APOPHTHEGMS OF LORD BACON.

First published in the Remains.

1. Plutarch said well, "It is otherwise in a commonwealth of men than of bees: the hive of a city or kingdom is in best condition when there is least of noise or buz in it."

2. The same Plutarch said of men of weak abilities set in great place, "That they were like little statues set on great bases, made to appear the less by their advancement."

3. He said again, "Good fame is like fire. When you have kindled it, you may easily preserve it; but if once you extinguish it, you will not easily kindle it again; at least, not make it burn as bright as it did."

4. Queen Elizabeth seeing Sir Edward —— in her garden, looked out at her window, and asked him in Italian, "What does a man think of when he thinks of nothing?" Sir Edward, who had not had the effect of some of the queen's grants so soon as he hoped and desired, paused a little; and then made answer, "Madam, he thinks of a woman's promise." The queen shrunk in her head; but was heard to say, "Well, Sir Edward, I must not confute you." Anger makes dull men witty, but it keeps them poor.

5. When any great officer, ecclesiastical or civil, was to be made, the queen would inquire after the piety, integrity, and learning of the man. And when she was satisfied in these qualifications, she would consider of his personage. And upon such an occasion she pleased once to say to me, "Bacon, how can the magistrate maintain his authority when the man is despised?"

6. In eighty-eight, when the queen went from Temple-bar along Fleet-street, the lawyers were ranked on one side, and the companies of the city on the other; said Mr. Bacon to a lawyer who stood next to him, "Do but observe the courtiers; if they bow first to the citizens, they are in debt; if first to us, they are in law."

7. King James was wont to be very earnest with the country gentlemen to go from London to their country

houses. And sometimes he would say thus to them, "Gentlemen, at London you are like ships at sea, which shew like nothing; but in your country villages you are like ships in a river, which look like great things."

8. Soon after the death of a great officer, who was judged no advancer of the king's matters, the king said to his solicitor Bacon, who was his kinsman, "Now tell me truly, what say you of your cousin that is gone?" Mr. Bacon answered, "Sir, since your majesty doth charge me, I'll e'en deal plainly with you, and give you such a character of him, as if I were to write his story. I do think he was no fit counsellor to make your affairs better; but yet he was fit to have kept them from growing worse." The king said, "On my so'l, man, in the first thou speakest like a true man, and in the latter, like a kinsman."

9. King James, as he was a prince of great judgment, so he was a prince of a marvellous pleasant humour; and there now come into my mind two instances of it. As he was going through Lusen, by Greenwich, he asked what town it was? They said, Lusen. He asked a good while after, "What town is this we are now in?" They said still, 'twas Lusen. "On my so'l," said the king, "I will be king of Lusen."

10. In some other of his progresses, he asked how far it was to a town whose name I have forgotten. They said, Six miles Half an hour after, he asked again. One said, Six miles and an half. The king alighted out of his coach, and crept under the shoulder of his led horse. And when some asked his majesty what he meant? "I must stalk," said he, "for yonder town is shy, and flies me."

11. Count Gondomar sent a compliment to my lord St. Alban, wishing him a good Easter. My lord thanked the messenger, and said, "He could not at present requite the count better than in returning him the like; that he wished his lordship a good Passover."

12. My lord chancellor Elsmere, when he had read a petition which he disliked, would say, "What, you would have my hand to this now?" And the party answering, "Yes;" he would say farther, "Well, so you shall:

nay, you shall have both my hands to it." And so would, with both his hands, tear it in pieces.

13. Sir Francis Bacon was wont to say of an angry man who suppressed his passion, "That he thought worse than he spake;" and of an angry man that would chide, "That he spoke worse than he thought."

14. He wont also to say, "That power in an ill man was like the power of a black witch; he could do hurt, but no good with it." And he would add, "That the magicians could turn water into blood, but could not turn the blood again to water."

15. When Mr. Attorney Coke, in the exchequer, gave high words to Sir Francis Bacon, and stood much upon his higher place; Sir Francis said to him, "Mr. Attorney, the less you speak of your own greatness, the more I shall think of it: and the more, the less."

16. Sir Francis Bacon coming into the earl of Arundel's garden, where there were a great number of ancient statues of naked men and women, made a stand, and, as astonished, cried out, "The resurrection!"

17. Sir Francis Bacon, who was always for moderate counsels, when one was speaking of such a reformation of the Church of England, as would in effect make it no Church; said thus to him, "Sir, the subject we talk of is the eye of England; and if there be a speck or two in the eye, we endeavour to take them off; but he were a strange oculist who would pull out the eye."

18. The same Sir Francis Bacon was wont to say, "That those who left useful studies for useless scholastic speculations, were like the Olympic gamesters, who abstained from necessary labours, that they might be fit for such as were not so."

19. He likewise often used this comparison: "[1] The empirical philosophers are like to pismires; they only lay up and use their store. The rationalists are like the spiders; they spin all out of their own bowels. But give me a philosopher, who like the bee hath a middle faculty, gathering from abroad, but digesting that which is gathered by his own virtue."

[1] See the substance of this in *Novum Organum*; and *Cogitata et Visa*.

20. The lord St. Alban, who was not over-hasty to raise theories, but proceeded slowly by experiments, was wont to say to some philosophers, who would not go his pace, " Gentlemen, nature is a labyrinth, in which the very haste you move with, will make you lose your way."

21. The same lord, when he spoke of the Dutchmen, used to say, " That we could not abandon them for our safety, nor keep them for our profit." And sometimes he would express the same sense in this manner; " We hold the Belgic lion by the ears."

22. The same lord, when a gentleman seemed not much to approve of his liberality to his retinue, said to him, " Sir, I am all of a piece; if the head be lifted up, the inferior parts of the body must too."

23. The lord Bacon was wont to commend the advice of the plain old man at Buxton, that sold besoms: a proud lazy young fellow came to him for a besom upon trust; to whom the old man said, " Friend, hast thou no money? borrow of thy back, and borrow of thy belly, they'll ne'er ask thee again, I shall be dunning thee every day."

24. Jack Weeks said of a great man, just then dead, who pretended to some religion, but was none of the best livers, " Well, I hope he is in heaven. Every man thinks as he wishes; but if he be in heaven, 'twere pity it were known."

ORNAMENTA RATIONALIA:

OR,

ELEGANT SENTENCES,

SOME MADE, OTHERS COLLECTED BY THE LORD BACON; AND BY HIM PUT UNDER THE ABOVESAID TITLE.

Collected out of the Mimi of Publius, and published in the Remains.

---

1. "ALEATOR, quanto in arte est melior, tanto est nequior."
   A gamester, the greater master he is in his art, the worse man he is.
2. "Arcum intensio frangit; animum, remissio."
   Much bending breaks the bow; much unbending, the mind."
3. "Bis vincit, qui se vincit in victoria."
   He conquers twice, who upon victory overcomes himself.
4. "Cum vitia prosint, peccat, qui recte facit."
   If vices were upon the whole matter profitable, the virtuous man would be the sinner.
5. "Bene dormit, qui non sentit quod male dormiat."
   He sleeps well, who feels not that he sleeps ill.
6. "Deliberare utilia, mora est tutissima."
   To deliberate about useful things, is the safest delay.
7. "Dolor decrescit, ubi quo crescat non habet."
   The flood of grief decreaseth, when it can swell no higher.
8. "Etiam innocentes cogit mentiri dolor."
   Pain makes even the innocent man a liar.
9. "Etiam celeritas in desiderio, mora est."
   In desire, swiftness itself is delay.
10. "Etiam capillus unus habet umbram suam."
    The smallest hair casts a shadow.
11. "Fidem qui perdit, quo se servat in reliquum?"
    He that has lost his faith, what has he left to live on?

12. " Formosa facies muta commendatio est."
A beautiful face is a silent commendation.
13. " Fortuna nimium quem fovet, stultum facit."
Fortune makes him a fool, whom she makes her darling.
14. " Fortuna obesse nulli contenta est semel."
Fortune is not content to do a man but one ill turn.
15. " Facit gratum fortuna, quem nemo videt."
The fortune which nobody sees, makes a man happy and unenvied.
16. " Heu! quam miserum est ab illo lædi, de quo non possis queri."
O! what a miserable thing it is to be hurt by such a one of whom it is in vain to complain.
17. " Homo toties moritur quoties amittit suos."
A man dies as often as he loses his friends.
18. " Hæredis fletus sub persona risus est."
The tears of an heir are laughter under a vizard.
19. " Jucundum nihil est, nisi quod reficit varietas."
Nothing is pleasant, to which variety does not give a relish.
20. " Invidiam ferre, aut fortis, aut felix potest."
He may bear envy, who is either courageous or happy.
21. " In malis sperare bonum, nisi innocens, nemo potest."
None but a virtuous man can hope well in ill circumstances.
22. " In vindicando, criminosa est celeritas."
In taking revenge, the very haste we make is criminal.
23. " In calamitoso risus etiam injuria est."
When men are in calamity, if we do but laugh we offend.
24. " Improbe Neptunum accusat, qui iterum naufragium facit."
He accuseth Neptune unjustly, who makes shipwreck a second time.
25. " Multis minatur, qui uni facit injuriam."
He that injures one, threatens an hundred.

26 " Mora omnis ingrata est, sed facit sapientiam."
All delay is ungrateful, but we are not wise without it.

27. " Mori est felicis antequam mortem invocet."
Happy he who dies ere he calls for death to take him away.

28. " Malus ubi bonum se simulat, tunc est pessimus."
An ill man is always ill; but he is then worst of all, when he pretends to be a saint.

29. " Magno cum periculo custoditur, quod multis placet."
Lock and key will scarce keep that secure, which pleases every body.

30. " Male vivunt qui se semper victuros putant."
They think ill, who think of living always.

31. " Male secum agit æger, medicum qui hæredem facit."
That sick man does ill for himself, who makes his physician his heir.

32. " Multos timere debet, quem multi timent."
He of whom many are afraid, ought himself to fear many.

33. " Nulla tam bona est fortuna, de qua nil possis queri."
There is no fortune so good, but it bates an ace.

34. " Pars beneficii est, quod petitur si bene neges."
It is part of the gift, if you deny genteely what is asked of you.

35. " Timidus vocat se cautum, parcum sordidus."
The coward calls himself a wary man; and the miser says he is frugal.

36. " O vita! misero longa, felici brevis."
O life! an age to him that is in misery; and to him that is happy, a moment.

A COLLECTION OF SENTENCES

OUT OF SOME OF THE

WRITINGS OF THE LORD BACON.

1. It is a strange desire which men have, to seek power, and lose liberty.

2. Children increase the cares of life; but they mitigate the remembrance of death.

3. Round dealing is the honour of man's nature; and a mixture of falsehood is like alloy in gold and silver, which may make the metal work the better, but it embaseth it.

4. Death openeth the gate to good fame, and extinguisheth envy.

5. Schism in the spiritual body of the Church is a greater scandal than a corruption in manners: as, in the natural body, a wound or solution of continuity is worse than a corrupt humour.

6. Revenge is a kind of wild justice, which the more a man's nature runs to, the more ought law to weed it out.

7. He that studieth revenge, keepeth his own wounds green.

8. Revengeful persons live and die like witches: their life is mischievous, and their end is unfortunate.

9. It was an high speech of Seneca, after the manner of the Stoics, that the good things which belong to prosperity, are to be wished; but the good things which belong to adversity, are to be admired.

10. He that cannot see well, let him go softly.

11. If a man be thought secret, it inviteth discovery; as the more close air sucketh in the more open.

12. Keep your authority wholly from your children, not so your purse.

13. Men of noble birth are noted to be envious towards new men when they rise; for the distance is altered; and it is like a deceit of the eye, that when others come on, they think themselves go back.

14. That envy is most malignant which is like Cain's, who envied his brother, because his sacrifice was better accepted, when there was nobody but God to look on.

15. The lovers of great place are impatient of privateness, even in age, which requires the shadow: like old townsmen, that will be still sitting at their street door, though there they offer age to scorn.

16. In evil, the best condition is, not to will: the next, not to can.

17. In great place, ask counsel of both times: of the ancient time, what is best; and of the latter time, what is fittest.

18. As in nature things move more violently to their place, and calmly in their place: so virtue in ambition is violent; in authority, settled and calm.

19. Boldness in civil business is like pronunciation in the orator of Demosthenes; the first, second, and third thing.

20. Boldness is blind: wherefore it is ill in counsel, but good in execution. For in counsel it is good to see dangers; in execution, not to see them, except they be very great.

21. Without good-nature, man is but a better kind of vermin.

22. God never wrought miracle to convince atheism, because his ordinary works convince it.

23. The great atheists indeed are hypocrites, who are always handling holy things, but without feeling; so as they must needs be cauterized in the end.

24. The master of superstition is the people. And in all superstition, wise men follow fools.

25. In removing superstitions, care would be had, that, as it fareth in ill purgings, the good be not taken away with the bad: which commonly is done when the people is the physician.

26. He that goeth into a country before he hath some entrance into the language, goeth to school, and not to travel.

27. It is a miserable state of mind, and yet it is com-

monly the case of kings, to have few things to desire, and many things to fear.

28. Depression of the nobility may make a king more absolute, but less safe.

29. All precepts concerning kings are, in effect, comprehended in these remembrances: remember thou art a man; remember thou art God's vicegerent: the one bridleth their power, and the other their will.

30. Things will have their first or second agitation: if they be not tossed upon the arguments of counsel, they will be tossed upon the waves of fortune.

31. The true composition of a counsellor is, rather to be skilled in his master's business than his nature; for then he is like to advise him, and not to feed his humour.

32. Private opinion is more free, but opinion before others is more reverend.

33. Fortune is like a market, where many times if you stay a little the price will fall.

34. Fortune sometimes turneth the handle of the bottle, which is easy to be taken hold of; and after, the belly, which is hard to grasp.

35. Generally it is good to commit the beginning of all great actions to Argus with an hundred eyes; and the ends of them to Briareus with an hundred hands; first to watch, and then to speed.

36. There is great difference betwixt a cunning man and a wise man. There be that can pack the cards, who yet cannot play well; they are good in canvasses and factions, and yet otherwise mean men.

37. Extreme self-lovers will set a man's house on fire, though it were but to roast their eggs.

38. New things, like strangers, are more admired, and less favoured.

39. It were good that men, in their innovations, would follow the example of time itself, which indeed innovateth greatly, but quietly, and by degrees scarce to be perceived.

40. They that reverence too much old time, are but a scorn to the new.

41. The Spaniards and Spartans have been noted to

be of small dispatch. "Mi venga la muerte de Spagna;" Let my death come from Spain, for then it will be sure to be long a coming.

42. You had better take for business a man somewhat absurd, than over-formal.

43. Those who want friends to whom to open their griefs, are cannibals of their own hearts.

44. Number itself importeth not much in armies, where the people are of weak courage; for, as Virgil says, it never troubles a wolf how many the sheep be.

45. Let states that aim at greatness, take heed how their nobility and gentry multiply too fast. In coppice woods, if you leave your staddles too thick, you shall never have clean underwood, but shrubs and bushes.

46. A civil war is like the heat of a fever; but a foreign war is like the heat of exercise, and serveth to keep the body in health.

47. Suspicions among thoughts, are like bats among birds, they ever fly by twilight.

48. Base natures, if they find themselves once suspected, will never be true.

49. Men ought to find the difference between saltness and bitterness. Certainly he that hath a satirical vein, as he maketh others afraid of his wit, so he had need be afraid of others' memory.

50. Discretion in speech is more than eloquence.

51. Men seem neither well to understand their riches, nor their strength: of the former they believe greater things than they should, and of the latter much less. And from hence certain fatal pillars have bounded the progress of learning.

52. Riches are the baggage of virtue; they cannot be spared, nor left behind: but they hinder the march.

53. Great riches have sold more men than ever they have bought out.

54. Riches have wings, and sometimes they fly away of themselves, and sometimes they must be set flying to bring in more.

55. He that defers his charity until he is dead, is, if a man weighs it rightly, rather liberal of another man's than of his own.

56. Ambition is like choler; if it can move, it makes men active; if it be stopped, it becomes adust, and makes men melancholy.

57. To take a soldier without ambition, is to pull off his spurs.

58. Some ambitious men seem as skreens to princes in matters of danger and envy. For no man will take such parts, except he be like the seel'd dove, that mounts and mounts, because he cannot see about him.

59. Princes and states should choose such ministers as are more sensible of duty than rising; and should discern a busy nature from a willing mind.

60. A man's nature runs either to herbs or weeds; therefore let him seasonably water the one, and destroy the other.

61. If a man look sharply and attentively, he shall see fortune; for though she be blind, she is not invisible.

62. Usury bringeth the treasure of a realm or state into few hands: for the usurer being at certainties, and others at uncertainties; at the end of the game most of the money will be in the box.

63. Virtue is best in a body that hath rather dignity of presence, than beauty of aspect. The beautiful prove accomplished, but not of great spirit; and study, for the most part, rather behaviour than virtue.

64. The best part of beauty is that which a picture cannot express.

65. He who builds a fair house upon an ill seat, commits himself to prison.

66. If you will work on any man, you must either know his nature and fashions, and so lead him; or his ends, and so persuade him; or his weaknesses and disadvantages, and so awe him; or those that have interest in him, and so govern him.

67. Costly followers, among whom we may reckon those who are importunate in suits, are not to be liked; lest, while a man maketh his train longer, he make his wings shorter.

68. Fame is like a river that beareth up things light and swollen, and drowns things weighty and solid.

69. Seneca saith well, that anger is like ruin, which breaks itself upon that it falls.

70. Excusations, cessions, modesty itself well governed, are but arts of ostentation.

71. High treason is not written in ice; that when the body relenteth, the impression should go away.

72. The best governments are always subject to be like the fairest crystals, wherein every icicle or grain is seen, which in a fouler stone is never perceived.

73. Hollow church papists are like the roots of nettles, which themselves sting not; but yet they bear all the stinging leaves.

SHORT NOTES

FOR

CIVIL CONVERSATION.

1. To deceive mens expectations generally, with cautel, argueth a staid mind, and unexpected constancy: viz. in matters of fear, anger, sudden joy or grief, and all things which may affect or alter the mind in public or sudden accidents, or such like.

2. It is necessary to use a stedfast countenance, not wavering with action, as in moving the head or hand too much, which sheweth a fantastical, light, and fickle operation of the spirit, and consequently like mind as gesture: only it is sufficient, with leisure, to use a modest action in either.

3. In all kinds of speech, either pleasant, grave, severe, or ordinary, it is convenient to speak leisurely, and rather drawingly, than hastily; because hasty speech confounds the memory, and oftentimes, besides unseemliness, drives a man either to a non-plus or unseemly stammering, harping upon that which should follow; whereas a slow speech confirmeth the memory, addeth a conceit of wisdom to the hearers, besides a seemliness of speech and countenance.

4. To desire in discourse to hold all arguments, is ridiculous, wanting true judgement; for in all things no man can be exquisite.

5, 6. To have common places to discourse, and to want variety, is both tedious to the hearers, and shews a shallowness of conceit; therefore it is good to vary, and suit speeches with the present occasions; and to have a moderation in all our speeches, especially in jesting, of religion, state, great persons, weighty and important business, poverty, or any thing deserving pity.

7. A long continued speech, without a good speech of interlocution, sheweth slowness: and a good reply, without a good set speech, sheweth shallowness and weakness.

8. To use many circumstances, ere you come to the matter, is wearisome; and to use none at all, is but blunt.

9. Bashfulness is a great hindrance to a man, both of uttering his conceit, and understanding what is propounded unto him: wherefore it is good to press himself forwards with discretion, both in speech, and company of the better sort.

"Usus promptos facit."

AN ESSAY ON DEATH.

1. I HAVE often thought upon death, and I find it the least of all evils. All that which is past is as a dream; and he that hopes or depends upon time coming, dreams waking. So much of our life as we have discovered is already dead; and all those hours which we share, even from the breasts of our mother, until we return to our grand-mother the earth, are part of our dying days; whereof even this is one, and those that succeed are of the same nature, for we die daily; and as others have given place to us, so we must in the end give way to others.

2. Physicians, in the name of death include all sorrow, anguish, disease, calamity, or whatsoever can fall in the life of man, either grievous or unwelcome: but these things are familiar unto us, and we suffer them every hour; therefore we die daily, and I am older since I affirmed it.

3. I know many wise men, that fear to die; for the

change is bitter, and flesh would refuse to prove it: besides, the expectation brings terror, and that exceeds the evil. But I do not believe, that any man fears to be dead, but only the stroke of death: and such are my hopes, that if heaven be pleased, and nature renew but my lease for twenty-one years more, without asking longer days, I shall be strong enough to acknowledge without mourning that I was begotten mortal. Virtue walks not in the highway, though she go *per alta;* this is strength and the blood to virtue, to contemn things that be desired, and to neglect that which is feared.

4. Why should man be in love with his fetters, though of gold? Art thou drowned in security? Then I say thou art perfectly dead. For though thou movest, yet thy soul is buried within thee, and thy good angel either forsakes his guard or sleeps. There is nothing under heaven, saving a true friend, who cannot be counted within the number of moveables, unto which my heart doth lean. And this dear freedom hath begotten me this peace, that I mourn not for that end which must be, nor spend one wish to have one minute added to the incertain date of my years. It was no mean apprehension of Lucian, who says of Menippus, that in his travels through hell he knew not the kings of the earth from other men, but only by their louder cryings and tears: which was fostered in them through the remorseful memory of the good days they had seen, and the fruitful havings which they so unwillingly left behind them: he that was well seated, looked back at his portion, and was loth to forsake his farm; and others, either minding marriages, pleasures, profit, or preferment, desired to be excused from death's banquet; they had made an appointment with earth, looking at the blessings, not the hand that enlarged them, forgetting how unclothedly they came hither, or with what naked ornaments they were arrayed.

5. But were we servants of the precept given, and observers of the heathens rule "memento mori," and not become benighted with this seeming felicity, we should enjoy it as men prepared to lose, and not wind up our thoughts upon so perishing a fortune: he that

is not slackly strong, as the servants of pleasure, how can he be found unready to quit the veil and false visage of his perfection? The soul having shaken off her flesh, doth then set up for herself, and contemning things that are under, shews what finger hath enforced her; for the souls of idiots are of the same piece with those of statesmen, but now and then nature is at a fault, and this good guest of ours takes soil in an imperfect body, and so is slackened from shewing her wonders; like an excellent musician, which cannot utter himself upon a defective instrument.

6. But see how I am swerved, and lose my course, touching at the soul, that doth least hold action with death, who hath the surest property in this frail act; his stile is the end of all flesh, and the beginning of incorruption.

This ruler of monuments leads men for the most part out of this world with their heels forward; in token that he is contrary to life; which being obtained, sends men headlong into this wretched theatre, where being arrived, their first language is that of mourning. Nor in my own thoughts, can I compare men more fitly to any thing, than to the Indian fig-tree, which being ripened to his full height, is said to decline his branches down to the earth; whereof she conceives again, and they become roots in their own stock.

So man having derived his being from the earth, first lives the life of a tree, drawing his nourishment as a plant, and made ripe for death he tends downwards, and is sowed again in his mother the earth, where he perisheth not, but expects a quickening.

7. So we see death exempts not a man from being, but only presents an alteration; yet there are some men, I think, that stand otherwise persuaded. Death finds not a worse friend than an alderman, to whose door I never knew him welcome; but he is an importunate guest, and will not be said nay.

And though they themselves shall affirm, that they are not within, yet the answer will not be taken; and that which heightens their fear is, that they know they are in danger to forfeit their flesh, but are not wise of

the payment day: which sickly uncertainty is the occasion that, for the most part, they step out of this world unfurnished for their general account, and being all unprovided, desire yet to hold their gravity, preparing their souls to answer in scarlet.

Thus I gather, that death is disagreeable to most citizens, because they commonly die intestate: this being a rule, that when their will is made, they think themselves nearer a grave than before: now they, out of the wisdom of thousands, think to scare destiny, from which there is no appeal, by not making a will, or to live longer by protestation of their unwillingness to die. They are for the most part well made in this world, accounting their treasure by legions, as men do devils, their fortune looks toward them, and they are willing to anchor at it, and desire, if it be possible, to put the evil day far off from them, and to adjourn their ungrateful and killing period.

No, these are not the men which have bespoken death, or whose looks are assured to entertain a thought of him.

8. Death arrives gracious only to such as sit in darkness, or lie heavy burdened with grief and irons; to the poor Christian, that sits bound in the galley; to despairful widows, pensive prisoners, and deposed kings: to them whose fortune runs back, and whose spirit mutinies; unto such death is a redeemer, and the grave a place for retiredness and rest.

These wait upon the shore of death, and waft unto him to draw near, wishing above all others to see his star, that they might be led to his place, wooing the remorseless sisters to wind down the watch of their life, and to break them off before the hour.

9. But death is a doleful messenger to an usurer, and fate untimely cuts their thread: for it is never mentioned by him, but when rumours of war and civil tumults put him in mind thereof.

And when many hands are armed, and the peace of a city in disorder, and the foot of the common soldiers sounds an alarm on his stairs, then perhaps such a one, broken in thoughts of his moneys abroad, and cursing

the monuments of coin which are in his house, can be content to think of death, and, being hasty of perdition, will perhaps hang himself, lest his throat should be cut; provided that he may do it in his study, surrounded with wealth, to which his eye sends a faint and languishing salute, even upon the turning off; remembering always, that he have time and liberty, by writing, to depute himself as his own heir.

For that is a great peace to his end, and reconciles him wonderfully upon the point.

10. Herein we all dally with ourselves, and are without proof till necessity. I am not of those that dare promise to pine away myself in vain-glory, and I hold such to be but feat boldness, and them that dare commit it to be vain. Yet for my part, I think nature should do me great wrong, if I should be so long in dying, as I was in being born.

To speak truth, no man knows the lists of his own patience; nor can divine how able he shall be in his sufferings, till the storm come; the perfectest virtue being tried in action: but I would, out of a care to do the best business well, ever keep a guard, and stand upon keeping faith and a good conscience.

11. And if wishes might find place, I would die together, and not my mind often, and my body once; that is, I would prepare for the messengers of death, sickness and affliction, and not wait long, or be attempted by the violence of pain.

Herein I do not profess myself a Stoic, to hold grief no evil, but opinion, and a thing indifferent.

But I consent with Cæsar, that the suddenest passage is easiest, and there is nothing more awakens our resolve and readiness to die, than the quieted conscience, strengthened with opinion that we shall be well spoken of upon earth by those that are just, and of the family of virtue; the opposite whereof is a fury to man, and makes even life unsweet.

Therefore, what is more heavy than evil fame deserved? Or, likewise, who can see worse days, than he that yet living doth follow at the funerals of his own reputation?

I have laid up many hopes, that I am privileged from that kind of mourning, and could wish the like peace to all those with whom I wage love.

12. I might say much of the commodities that death can sell a man; but briefly, death is a friend of ours, and he that is not ready to entertain him, is not at home. Whilst I am, my ambition is not to fore-flow the tide; I have but so to make my interest of it, as I may account for it; I would wish nothing but what might better my days, nor desire any greater place than the front of good opinion. I make not love to the continuance of days, but to the goodness of them; nor wish to die, but refer myself to my hour, which the great Dispenser of all things hath appointed me; yet as I am frail, and suffered for the first fault, were it given me to choose, I should not be earnest to see the evening of my age; that extremity of itself being a disease, and a mere return into infancy: so that if perpetuity of life might be given me, I should think what the Greek poet said, Such an age is a mortal evil. And since I must needs be dead, I require it may not be done before mine enemies, that I be not stript before I be cold; but before my friends. The night was even now; but that name is lost; it is not now late, but early. Mine eyes begin now to discharge their watch, and compound with this fleshly weakness for a time of perpetual rest; and I shall presently be as happy for a few hours, as I had died the first hour I was born.

THEOLOGICAL WORKS.

A

CONFESSION OF FAITH

WRITTEN BY

THE RIGHT HONOURABLE FRANCIS BACON,
BARON OF VERULAM, &c.

I BELIEVE that nothing is without beginning, but God; no nature, no matter, no spirit, but one only, and the same God. That God, as he is eternally almighty, only wise, only good in his nature; so he is eternally Father, Son, and Spirit, in persons.

I believe that God is so holy, pure, and jealous, as it is impossible for him to be pleased in any creature, though the work of his own hands; so that neither angel, man, nor world, could stand, or can stand, one moment in his eyes, without beholding the same in the face of a Mediator; and therefore, that before him, with whom all things are present, the Lamb of God was slain before all worlds; without which eternal counsel of his, it was impossible for him to have descended to any work of creation; but he should have enjoyed the blessed and individual society of three persons in Godhead for ever.

But that, out of his eternal and infinite goodness and love purposing to become a Creator, and to communicate to his creatures, he ordained in his eternal counsel, that one person of the Godhead should be united to one nature, and to one particular of his creatures: that so, in the person of the Mediator, the true ladder might be fixed, whereby God might descend to his creatures, and his creatures might ascend to God: so that God, by the reconcilement of the Mediator, turning his countenance towards his creatures, though not in equal light and

degree, made way unto the dispensation of his most holy and secret will; whereby some of his creatures might stand, and keep their state; others might possibly fall, and be restored; and others might fall, and not be restored to their estate, but yet remain in being, though under wrath and corruption: all with respect to the Mediator; which is the great mystery and perfect centre of all God's ways with his creatures, and unto which all his other works and wonders do but serve and refer.

That he chose, according to his good pleasure, man to be that creature, to whose nature the person of the eternal Son of God should be united; and amongst the generations of men, elected a small flock, in whom, by the participation of himself, he purposed to express the riches of his glory; all the ministration of angels, damnation of devils and reprobates, and universal administration of all creatures, and dispensation of all times, having no other end, but as the ways and ambages of God, to be further glorified in his saints, who are one with their head the Mediator, who is one with God.

That by the virtue of this his eternal counsel he condescended of his own good pleasure, and according to the times and seasons to himself known, to become a Creator; and by his eternal Word created all things; and by his eternal Spirit doth comfort and preserve them.

That he made all things in their first estate good, and removed from himself the beginning of all evil and vanity into the liberty of the creature: but reserved in himself the beginning of all restitution to the liberty of his grace; using, nevertheless, and turning the falling and defection of the creature, which to his prescience was eternally known, to make way to his eternal counsel, touching a Mediator, and the work he purposed to accomplish in him.

That God created spirits, whereof some kept their standing, and others fell: he created heaven and earth, and all their armies and generations; and gave unto them constant and everlasting laws, which we call nature;

which is nothing but the laws of the creation; which laws nevertheless have had three changes or times, and are to have a fourth or last. The first, when the matter of heaven and earth was created without forms: the second, the interim of perfection of every day's work: the third, by the curse, which notwithstanding was no new creation: and the last at the end of the world, the manner whereof is not yet fully revealed: so as the laws of nature, which now remain and govern inviolably till the end of the world, began to be in force when God first rested from his works, and ceased to create; but received a revocation, in part, by the curse; since which time they change not.

That notwithstanding God hath rested and ceased from creating since the first sabbath, yet, nevertheless, he doth accomplish and fulfil his divine will in all things, great and small, singular and general, as fully and exactly by providence, as he could by miracle and new creation, though his working be not immediate and direct, but by compass; not violating nature, which is his own law, upon the creature.

That at the first, the soul of man was not produced by heaven or earth, but was breathed immediately from God: so that the ways and proceedings of God with spirits are not included in nature; that is, in the laws of heaven and earth; but are reserved to the law of his secret will and grace: wherein God worketh still, and resteth not from the work of redemption, as he resteth from the work of creation; but continueth working till the end of the world; what time that work also shall be accomplished, and an eternal sabbath shall ensue. Likewise, that whensoever God doth transcend the law of nature by miracles, which may ever seem as new creations, he never cometh to that point or pass, but in regard of the work of redemption, which is the greater, and whereto all God's signs and miracles do refer.

That God created man in his own image, in a reasonable soul, in innocency, in free-will, and in sovereignty: that he gave him a law and commandment, which was in his power to keep, but he kept it not: that man made a total defection from God, presuming to imagine that

the commandments and prohibitions of God were not the rules of good and evil, but that good and evil had their own principles and beginnings, and lusted after the knowledge of those imagined beginnings; to the end, to depend no more upon God's will revealed, but upon himself, and his own light, as a God; than the which there could not be a sin more opposite to the whole law of God: that yet, nevertheless, this great sin was not originally moved by the malice of man, but was insinuated by the suggestion and instigation of the devil, who was the first defected creature, and fell of malice, and not by temptation.

That upon the fall of man, death and vanity entered by the justice of God; and the image of God in man was defaced; and heaven and earth, which were made for man's use, were subdued to corruption by his fall; but then, that instantly, and without intermission of time, after the word of God's law became, through the fall of man, frustrate as to obedience, there succeeded the greater word of the promise, that the righteousness of God might be wrought by faith.

That as well the law of God as the word of his promise endure the same for ever: but that they have been revealed in several manners, according to the dispensation of times. For the law was first imprinted in that remnant of light of nature, which was left after the fall, being sufficient to accuse: then it was more manifestly expressed in the written law; and was yet more opened by the prophets; and, lastly, expounded in the true perfection by the Son of God, the great Prophet, and perfect interpreter, as also fulfiller of the law. That likewise the word of the promise was manifested and revealed: first, by immediate revelation and inspiration; after by figures, which were of two natures: the one, the rites and ceremonies of the law; the other, the continual history of the old world, and Church of the Jews; which though it be literally true, yet is it pregnant of a perpetual allegory and shadow of the work of the redemption to follow. The same promise or evangile was more clearly revealed and declared by the prophets, and then by the Son himself, and lastly by the Holy Ghost, which illuminateth the Church to the end of the world.

That in the fulness of time, according to the promise and oath, of a chosen lineage descended the blessed seed of the woman, Jesus Christ, the only begotten Son of God and Saviour of the world; who was conceived by the power and overshadowing of the Holy Ghost, and took flesh of the Virgin Mary: that the Word did not only take flesh, or was joined to flesh, but was made flesh, though without confusion of substance or nature: so as the eternal Son of God and the ever blessed Son of Mary was one person; so one, as the blessed virgin may be truly and catholicly called *Deipara*, the Mother of God; so one, as there is no unity in universal nature, not that of the soul and body of man, so perfect; for the three heavenly unities, whereof that is the second, exceed all natural unities: that is to say, the unity of the three persons in Godhead; the unity of God and man in Christ; and the unity of Christ and the Church: the Holy Ghost being the worker of both these latter unities; for by the Holy Ghost was Christ incarnate and quickened in flesh, and by the Holy Ghost is man regenerate and quickened in spirit.

That Jesus, the Lord, became in the flesh a sacrificer, and a sacrifice for sin; a satisfaction and price to the justice of God; a meriter of glory and the kingdom; a pattern of all righteousness; a preacher of the word which himself was; a finisher of the ceremonies; a corner-stone to remove the separation between Jew and Gentile; an intercessor for the Church; a lord of nature in his miracles; a conqueror of death and the power of darkness in his resurrection; and that he fulfilled the whole counsel of God, performing all his sacred offices and anointing on earth, accomplished the whole work of the redemption and restitution of man to a state superior to the angels, whereas the state of man by creation was inferior, and reconciled and established all things according to the eternal will of the Father.

That in time, Jesus the Lord was born in the days of Herod, and suffered under the government of Pontius Pilate, being deputy of the Romans, and under the high priesthood of Caiaphas, and was betrayed by Judas, one of the twelve apostles, and was crucified at Hierusalem; and after a true and natural death, and his body laid in

the sepulchre, the third day he raised himself from the bonds of death, and arose and shewed himself to many chosen witnesses, by the space of divers days; and at the end of those days, in the sight of many, ascended into heaven; where he continueth his intercession; and shall from thence, at the day appointed, come in greatest glory to judge the world.

That the sufferings and merits of Christ, as they are sufficient to do away the sins of the whole world, so they are only effectual to those which are regenerate by the Holy Ghost; who breatheth where he will of free grace; which grace, as a seed incorruptible, quickeneth the spirit of man, and conceiveth him anew a son of God and member of Christ: so that Christ having man's flesh, and man having Christ's spirit, there is an open passage and mutual imputation; whereby sin and wrath was conveyed to Christ from man, and merit and life is conveyed to man from Christ: which seed of the Holy Ghost first figureth in us the image of Christ slain or crucified, through a lively faith; and then reneweth in us the image of God in holiness and charity; though both imperfectly, and in degrees far differing, even in God's elect, as well in regard of the fire of the Spirit, as of the illumination thereof; which is more or less in a large proportion: as namely, in the Church before Christ; which yet nevertheless was partaker of one and the same salvation with us, and of one and the same means of salvation with us.

That the work of the Spirit, though it be not tied to any means in heaven or earth, yet it is ordinarily dispensed by the preaching of the word; the administration of the sacraments; the covenants of the fathers upon the children, prayer, reading; the censures of the Church; the society of the godly; the cross and afflictions; God's benefits; his judgments upon others; miracles; the contemplation of his creatures: all which, though some be more principal, God useth as the means of vocation and conversion of his elect; not derogating from his power to call immediately by his grace, and at all hours and moments of the day, that is, of man's life, according to his good pleasure.

That the word of God, whereby his will is revealed, continued in revelation and tradition until Moses; and that the Scriptures were from Moses time to the times of the apostles and evangelists; in whose age, after the coming of the Holy Ghost, the teacher of all truth, the book of the Scriptures was shut and closed, so as not to receive any new addition; and that the Church hath no power over the Scriptures to teach or command any thing contrary to the written word, but is as the ark, wherein the tables of the first testament were kept and preserved: that is to say, the Church hath only the custody and delivery over of the Scriptures committed unto the same; together with the interpretation of them, but such only as is conceived from themselves.

That there is an universal or catholic Church of God, dispersed over the face of the earth, which is Christ's spouse, and Christ's body; being gathered of the fathers of the old world, of the Church of the Jews, of the spirits of the faithful dissolved, and the spirits of the faithful militant, and of the names yet to be born, which are already written in the book of life. That there is also a visible Church, distinguished by the outward works of God's covenant, and the receiving of the holy doctrine, with the use of the mysteries of God, and the invocation, and sanctification of his holy name. That there is also an holy succession in the prophets of the new testament and fathers of the Church, from the time of the apostles and disciples which saw our Saviour in the flesh, unto the consummation of the work of the ministry; which persons are called from God by gift, or inward anointing; and the vocation of God followed by an outward calling and ordination of the Church.

I believe, that the souls of such as die in the Lord are blessed, and rest from their labours, and enjoy the sight of God, yet so, as they are in expectation of a farther revelation of their glory in the last day. At which time all flesh of man shall arise and be changed, and shall appear and receive from Jesus Christ his eternal judgment; and the glory of the saints shall then be full: and the kingdom shall be given up to God the Father: from which time all things shall continue for ever in that

being and state, which then they shall receive. So as there are three times, if times they may be called, or parts of eternity: The first, the time before beginnings, when the Godhead was only, without the being of any creature: the second, the time of the mystery, which continueth from the creation to the dissolution of the world: and the third, the time of the revelation of the sons of God; which time is the last, and is everlasting without change.

A PRAYER, OR PSALM,

MADE BY THE

LORD BACON, CHANCELLOR OF ENGLAND.

Most gracious Lord God, my merciful Father, from my youth up, my Creator, my Redeemer, my Comforter. Thou, O Lord, soundest and searchest the depths and secrets of all hearts: thou acknowledgest the upright of heart: thou judgest the hypocrite: thou ponderest mens thoughts and doings as in a balance: thou measurest their intentions as with a line: vanity and crooked ways cannot be hid from thee.

Remember, O Lord, how thy servant hath walked before thee: remember what I have first sought, and what hath been principal in my intentions. I have loved thy assemblies: I have mourned for the divisions of thy Church: I have delighted in the brightness of thy sanctuary. This vine which thy right hand hath planted in this nation, I have ever prayed unto thee, that it might have the first and the latter rain; and that it might stretch her branches to the seas and to the floods. The state and bread of the poor and oppressed have been precious in mine eyes: I have hated all cruelty and hardness of heart: I have, though in a despised weed, procured the good of all men. If any have been my enemies, I thought not of them; neither hath the sun almost set upon my displeasure; but I have been as a dove, free from superfluity of maliciousness. Thy creatures have been my books, but thy Scriptures much more. I have sought thee in the courts, fields, and gardens, but I have found thee in thy temples.

Thousands have been my sins, and ten thousands my transgressions; but thy sanctifications have remained with me, and my heart, through thy grace, hath been an unquenched coal upon thine altar. O Lord, my strength, I have since my youth met with thee in all my ways, by thy fatherly compassions, by thy comfortable chastisements, and by thy most visible providence. As thy

favours have increased upon me, so have thy corrections; so as thou hast been always near me, O Lord; and ever as my worldly blessings were exalted, so secret darts from thee have pierced me; and when I have ascended before men, I have descended in humiliation before thee. And now, when I thought most of peace and honour, thy hand is heavy upon me, and hath humbled me according to thy former loving-kindness, keeping me still in thy fatherly school, not as a bastard, but as a child. Just are thy judgments upon me for my sins, which are more in number than the sands of the sea, but have no proportion to thy mercies; for what are the sands of the sea, earth, heavens, and all these are nothing to thy mercies. Besides my innumerable sins, I confess before thee, that I am debtor to thee for the gracious talent of thy gifts and graces, which I have neither put into a napkin, nor put it, as I ought, to exchangers, where it might have made best profit, but mispent it in things for which I was least fit: so I may truly say, my soul hath been a stranger in the course of my pilgrimage. Be merciful unto me, O Lord, for my Saviour's sake, and receive me into thy bosom, or guide me in thy ways.

A PRAYER

Made and used by the Lord Chancellor Bacon.

O ETERNAL God, and most merciful Father in Jesus Christ: Let the words of our mouths, and the meditations of our hearts be now and ever gracious in thy sight, and acceptable unto thee, O Lord, our God, our strength, and our Redeemer.

O Eternal God, and most merciful Father in Jesus Christ, in whom thou hast made a covenant of grace and mercy with all those that come unto thee in him; in his name and mediation we humbly prostrate ourselves before the throne of thy mercies seat, acknowledging that, by the breach of all thy holy laws and commandments, we are become wild olive-branches,

strangers to thy covenant of grace; we have defaced in ourselves thy sacred image imprinted in us by creation; we have sinned against heaven and before thee, and are no more worthy to be called thy children. O admit us into the place even of hired servants. Lord, thou hast formed us in our mothers wombs, thy providence hath hitherto watched over us, and preserved us unto this period of time: O stay not the course of thy mercies and loving-kindness towards us: have mercy upon us, O Lord, for thy dear Son Christ Jesus sake, who is the way, the truth, and the life. In him, O Lord, we appeal from thy justice to thy mercy, beseeching thee in his name, and for his sake only, thou wilt be graciously pleased freely to pardon and forgive us all our sins and disobedience, whether in thought, word, or deed, committed against thy divine Majesty; and in his precious blood-shedding, death, and perfect obedience, free us from the guilt, the stain, the punishment, and dominion of all our sins, and clothe us with his perfect righteousness. There is mercy with thee, O Lord, that thou mayest be feared; yea, thy mercies swallow up the greatness of our sins: speak peace to our souls and consciences; make us happy in the free remission of all our sins, and be reconciled to thy poor servants in Jesus Christ, in whom thou art well pleased: suffer not the works of thine own hands to perish; thou art not delighted in the death of sinners, but in their conversion. Turn our hearts, and we shall be turned; convert us, and we shall be converted; illuminate the eyes of our minds and understanding with the bright beams of thy Holy Spirit, that we may daily grow in the saving knowledge of the heavenly mystery of our redemption, wrought by our dear Lord and Saviour Jesus Christ; sanctify our wills and affection by the same Spirit, the most sacred fountain of all grace and goodness; reduce them to the obedience of thy most holy will in the practice of all piety toward thee, and charity towards all men. Inflame our hearts with thy love, cast forth of them what displeaseth thee, all infidelity, hardness of heart, profaneness, hypocrisy, contempt of thy holy word and ordinances, all uncleanness, and whatsoever

advanceth itself in opposition to thy holy will. And grant that henceforth, through thy grace, we may be enabled to lead a godly, holy, sober, and Christian life, in true sincerity and uprightness of heart before thee. To this end, plant thy holy fear in our hearts, grant that it may never depart from before our eyes, but continually guide our feet in the paths of thy righteousness, and in the ways of thy commandments: increase our weak faith, grant it may daily bring forth the true fruits of unfeigned repentance, that by the power of the death of our Lord and Saviour Jesus Christ we may daily die unto sin, and by the power of his resurrection we may be quickened, and raised up to newness of life, may be truly born anew, and may be effectually made partakers of the first resurrection, that then the second death may never have dominion over us. Teach us, O Lord, so to number our days, that we may apply our hearts unto wisdom; make us ever mindful of our last end, and continually to exercise the knowledge of grace in our hearts, that in the said divorce of soul and body, we may be translated here to that kingdom of glory prepared for all those that love thee, and shall trust in thee; even then and ever, O Lord, let thy holy angels pitch their tents round about us, to guard and defend us from all the malice of Satan, and from all perils both of soul and body. Pardon all our unthankfulness, make us daily more and more thankful for all thy mercies and benefits daily poured down upon us. Let these our humble prayers ascend to the throne of grace, and be granted not only for these mercies, but for whatsoever else thy wisdom knows needful for us; and for all those that are in need, misery, and distress, whom, Lord, thou hast afflicted either in soul or body; grant them patience and perseverance in the end, and to the end: And that, O Lord, not for any merits of ours, but only for the merits of thy Son, and our alone Saviour Christ Jesus; to whom with thee and the Holy Spirit be ascribed all glory, &c. Amen.

THE STUDENT'S PRAYER.

To God the Father, God the Word, God the Spirit, we pour forth most humble and hearty supplications; that he remembering the calamities of mankind, and the pilgrimage of this our life, in which we wear out days few and evil, would please to open to us new refreshments out of the fountains of his goodness, for the alleviating of our miseries. This also we humbly and earnestly beg, that human things may not prejudice such as are divine; neither that from the unlocking of the gates of sense, and the kindling of a greater natural light, any thing of incredulity, or intellectual night, may arise in our minds towards divine mysteries. But rather, that by our mind thoroughly cleansed and purged from fancy and vanities, and yet subject and perfectly given up to the divine oracles, there may be given unto faith the things that are faith's. Amen.

THE WRITER'S PRAYER.

Thou, O Father, who gavest the visible light as the first-born of thy creatures, and didst pour into man the intellectual light as the top and consummation of thy workmanship, be pleased to protect and govern this work, which coming from thy goodness, returneth to thy glory. Thou after thou hadst reviewed the works which thy hands had made, beheldest that every thing was very good, and thou didst rest with complacency in them. But man, reflecting on the works which he had made, saw that all was vanity and vexation of spirit, and could by no means acquiesce in them. Wherefore, if we labour in thy works with the sweat of our brows, thou wilt make us partakers of thy vision and thy sabbath. We humbly beg that this mind may be stedfastly in us; and that thou, by our hands, and also by the hands of others, on whom thou shalt bestow the same

spirit, wilt please to convey a largess of new alms to thy family of mankind. These things we commend to thy everlasting love, by our Jesus, thy Christ, God with us. Amen.

THE CHARACTERS OF A BELIEVING CHRISTIAN,

In paradoxes and seeming contradictions.

1. A CHRISTIAN is one that believes things his reason cannot comprehend; he hopes for things which neither he nor any man alive ever saw: he labours for that which he knoweth he shall never obtain; yet in the issue, his belief appears not to be false; his hope makes him not ashamed; his labour is not in vain.

2. He believes three to be one, and one to be three; a father not to be elder than his son; a son to be equal with his father; and one proceeding from both to be equal with both; he believing three persons in one nature, and two natures in one person.

3. He believes a virgin to be a mother of a son; and that very son of her's to be her maker. He believes him to have been shut up in a narrow room, whom heaven and earth could not contain. He believes him to have been born in time, who was and is from everlasting. He believes him to have been a weak child, carried in arms, who is the Almighty; and him once to have died, who only hath life and immortality in himself.

4. He believes the God of all grace to have been angry with one that hath never offended him; and that God, that hates sin, to be reconciled to himself, though sinning continually, and never making, or being able to make him satisfaction. He believes a most just God to have punished a most just person, and to have justified himself though a most ungodly sinner. He believes himself freely pardoned, and yet a sufficient satisfaction was made for him.

5. He believes himself to be precious in God's sight, and yet lothes himself in his own. He dares not justify himself even in those things wherein he can find no fault with himself, and yet believes God accepts him in those services wherein he is able to find many faults.

6. He praises God for his justice, and yet fears him for his mercy. He is so ashamed as that he dares not open his mouth before God; and yet he comes with boldness to God, and asks him any thing he needs. He is so humble as to acknowledge himself to deserve nothing but evil; and yet believes that God means him all good. He is one that fears always, yet is as bold as a lion. He is often sorrowful, yet always rejoicing; many times complaining, yet always giving of thanks. He is the most lowly-minded, yet the greatest aspirer; most contented, yet ever craving.

7. He bears a lofty spirit in a mean condition; when he is ablest, he thinks meanest of himself. He is rich in poverty, and poor in the midst of riches. He believes all the world to be his, yet he dares take nothing without special leave from God. He covenants with God for nothing, yet looks for a great reward. He loseth his life and gains by it; and whilst he loseth it, he saveth it.

8. He lives not to himself, yet of all others he is most wise for himself. He denieth himself often, yet no man loveth himself so well as he. He is most reproached, yet most honoured. He hath most afflictions, and most comforts.

9. The more injury his enemies do him, the more advantages he gains by them. The more he forsakes worldly things, the more he enjoys them.

10. He is the most temperate of all men, yet fares most deliciously; he lends and gives most freely, yet he is the greatest usurer; he is meek towards all men, yet inexorable by men. He is the best child, husband, brother, friend; yet hates father and mother, brother and sister. He loves all men as himself, yet hates some men with a perfect hatred.

11. He desires to have more grace than any man hath in the world, yet is truly sorrowful when he seeth

any man have less than himself; he knoweth no man after the flesh, yet gives all men their due respects; he knoweth if he please man he cannot be the servant of Christ; yet for Christ's sake he pleaseth all men in all things. He is a peace-maker, yet is a continual fighter, and is an irreconcileable enemy.

12. He believes him to be worse than an infidel that provides not for his family, yet himself lives and dies without care. He accounts all his superiors, yet stands stiffly upon authority. He is severe to his children, because he loveth them; and by being favourable unto his enemy, he revengeth himself upon him.

13. He believes the angels to be more excellent creatures than himself, and yet accounts them his servants. He believes that he receives many good things by their means, and yet he neither prays for their assistance, nor offers them thanks, which he doth not disdain to do to the meanest Christian.

14. He believes himself to be a king, how mean soever he be: and how great soever he be, yet he thinks himself not too good to be a servant to the poorest saint.

15. He is often in prison, yet always at liberty; a freeman, though a servant. He loves not honour amongst men, yet highly prizeth a good name.

16. He believes that God hath bidden every man that doth him good to do so; he yet of any man is the most thankful to them that do aught for him. He would lay down his life to save the soul of his enemy, yet will not adventure upon one sin to save the life of him who saved his.

17. He swears to his own hindrance, and changeth not; yet knoweth that his oath cannot tie him to sin.

18. He believes Christ to have no need of any thing he doth, yet maketh account that he doth relieve Christ in all his acts of charity. He knoweth he can do nothing of himself, yet labours to work out his own salvation. He professeth he can do nothing, yet as truly professeth he can do all things: he knoweth that flesh and blood cannot inherit the kingdom of God, yet believeth he shall go to heaven both body and soul.

19. He trembles at God's word, yet counts it sweeter to him than honey and the honey-comb, and dearer than thousands of gold and silver.

20. He believes that God will never damn him, and yet fears God for being able to cast him into hell. He knoweth he shall not be saved by, nor for, his good works, yet he doth all the good works he can.

21. He knoweth God's providence is in all things, yet is so diligent in his calling and business, as if he were to cut out the thread of his happiness. He believes before-hand that God hath purposed what he shall be, and that nothing can make him to alter his purpose; yet prays and endeavours, as if he would force God to save him for ever.

22. He prays and labours for that which he is confident God means to give; and the more assured he is, the more earnest he prays for that he knows he shall never obtain, and yet gives not over. He prays and labours for that which he knows he shall be no less happy without; he prays with all his heart not to be led into temptation, yet rejoiceth when he is fallen into it; he believes his prayers are heard, even when they are denied, and gives thanks for that which he prays against.

23. He hath within him both flesh and spirit, yet he is not a double-minded man; he is often led captive by the law of sin, yet it never gets dominion over him; he cannot sin, yet he can do nothing without sin. He doth nothing against his will, yet maintains he doth what he would not. He wavers and doubteth, yet obtains.

24. He is often tossed and shaken, yet is as mount Sion; he is a serpent and a dove; a lamb and a lion; a reed and a cedar. He is sometimes so troubled, that he thinks nothing to be true in religion; yet if he did think so, he could not at all be troubled. He thinks sometimes that God hath no mercy for him, yet resolves to die in the pursuit of it. He believes, like Abraham, against hope, and though he cannot answer God's logic, yet, with the woman of Canaan, he hopes to prevail with the rhetoric of importunity.

25. He wrestles, and yet prevails; and though yielding himself unworthy of the least blessing he enjoys, yet,

Jacob-like, he will not let him go without a new blessing. He sometimes thinks himself to have no grace at all, and yet how poor and afflicted soever he be besides, he would not change conditions with the most prosperous man under heaven, that is a manifest worldling.

26. He thinks sometimes that the ordinances of God do him no good, yet he would rather part with his life than be deprived of them.

27. He was born dead; yet so that it had been murder for any to have taken his life away. After he began to live, he was ever dying.

28. And though he hath an eternal life begun in him, yet he makes account he hath a death to pass through.

29. He counts self-murder a heinous sin, yet is ever busied in crucifying the flesh, and in putting to death his earthly members; not doubting but there will come a time of glory, when he shall be esteemed precious in the sight of the great God of heaven and earth, appearing with boldness at his throne, and asking any thing he needs; being endued with humility, by acknowledging his great crimes and offences, and that he deserveth nothing but severe punishment.

30. He believes his soul and body shall be as full of glory as them that have more; and no more full than theirs that have less.

31. He lives invisible to those that see him, and those that know him best do but guess at him; yet those many times judge more truly of him than he doth of himself.

32. The world will sometimes account him a saint, when God accounteth him a hypocrite; and afterwards, when the world branded him for an hypocrite, then God owned him for a saint.

33. His death makes not an end of him. His soul which was put into his body, is not to be perfected without his body; yet his soul is more happy when it is separated from his body, than when it was joined unto it: And his body, though torn in pieces, burnt to ashes, ground to powder, turned to rottenness, shall be no loser.

34. His Advocate, his Surety shall be his Judge; his mortal part shall become immortal; and what was sown in corruption and defilement shall be raised in incorruption and glory; and a finite creature shall possess an infinite happiness. Glory be to God.

AN ADVERTISEMENT

TOUCHING THE

CONTROVERSIES OF THE CHURCH OF ENGLAND.

It is but ignorance, if any man find it strange, that the state of religion, especially in the days of peace, should be exercised and troubled with controversies: for as it is the condition of the Church militant to be ever under trials, so it cometh to pass, that when the fiery trial of persecution ceaseth, there succeedeth another trial, which, as it were, by contrary blasts of doctrine, doth sift and winnow mens faith, and proveth whether they know God aright; even as that other of afflictions discovereth whether they love him better than the world. Accordingly was it foretold by Christ, saying, "that in the latter times it should be said, Lo here, lo there is Christ:" which is to be understood, not as if the very person of Christ should be assumed and counterfeited, but his authority and pre-eminence, which is to be the truth itself, should be challenged and pretended. Thus have we read and seen to be fulfilled that which followeth, "Ecce in deserto, ecce in penetralibus:" while some have sought the truth in the conventicles and conciliabules of heretics and sectaries; others in the external face and representation of the Church; and both sorts have been seduced. Were it then that the controversies of the Church of England were such, as they did divide the unity of the spirit, and not only such as do unswathe her of her bands, the bands of peace, yet could it be no occasion for any pretended catholic to judge us, or for any irreligious person to despise us; or if it be, it shall but happen to us all as it hath used to do; to them to be hardened, and to

us to endure the good pleasure of God. But now that our contentions are such, as we need not so much that general canon and sentence of Christ pronounced against heretics; "Erratis, nescientes Scripturas, et potestatem Dei;" "you do err, not knowing the Scripture, and the power of God:" as we need the admonition of St. James, "Let every man be swift to hear, slow to speak, slow to wrath;" and that the wound is no way dangerous, except we poison it with our remedies: as the former sort of men have less reason to make themselves music in our discord, so I have good hope that nothing shall displease ourselves, which shall be sincerely and modestly propounded for the appeasing of these dissensions. For if any shall be offended at this voice, "Vos estis fratres;" "ye are brethren, why strive ye?" he shall give a great presumption against himself, that he is the party that doth his brethren wrong.

The controversies themselves I will not enter into, as judging that the disease requireth rather rest than any other cure. Thus much we all know and confess, that they be not of the highest nature, for they are not touching the high mysteries of faith, such as detained the churches for many years after their first peace, what time the heretics moved curious questions, and made strange anatomies of the natures and person of Christ; and the catholic fathers were compelled to follow them with all subtlety of decisions and determinations to exclude them from their evasions, and to take them in their labyrinths; so as it is rightly said, "illis temporibus, ingeniosa res fuit, esse Christianum;" "in those days it was an ingenious and subtle thing to be a Christian."

Neither are they concerning the great parts of the worship of God, of which it is true, that "non servatur unitas in credendo, nisi eadem adsit in colendo;" there will be kept no unity in believing, except it be entertained in worshipping; such as were the controversies of the east and west churches touching images, and such as are many of those between the church of Rome and us: as about the adoration of the Sacrament, and the like; but we contend about ceremonies and

things indifferent, about the external policy and government of the Church; in which kind, if we would but remember that the ancient and true bonds of unity are "one faith, one baptism," and not one ceremony, one policy; if we would observe the league amongst Christians that is penned by our Saviour, "he that is not against us is with us;" if we could but comprehend that saying, "differentiæ rituum commendant unitatem doctrinæ;" "the diversities of ceremonies do set forth the unity of doctrine;" and that, "habet religio quæ sunt æternitatis, habet quæ sunt temporis;" "religion hath parts which belong to eternity, and parts which pertain to time:" and if we did but know the virtue of silence and slowness to speak, commended by St. James, our controversies of themselves would close up and grow together: but most especially, if we would leave the over-weening and turbulent humours of these times, and revive the blessed proceeding of the Apostles and Fathers of the primitive Church, which was, in the like and greater cases, not to enter into assertions and positions, but to deliver counsels and advices, we should need no other remedy at all: "si eadem consulis, frater, quæ affirmas, consulenti debetur reverentia, cum non debeatur fides affirmanti;" brother, if that which you set down as an assertion, you would deliver by way of advice, there were reverence due to your counsel, whereas faith is not due to your affirmation. St. Paul was content to speak thus, "Ego, non Dominus," "I, and not the Lord:" "Et, secundum consilium meum;" "according to my counsel." But now men do too lightly say, "Non ego, sed Dominus;" "not I, but the Lord:" yea, and bind it with an heavy denunciation of his judgments, to terrify the simple, which have not sufficiently understood out of Solomon, that "the causeless curse shall not come."

Therefore seeing the accidents are they which breed the peril, and not the things themselves in their own nature, it is meet the remedies be applied unto them, by opening what it is on either part, that keepeth the wound green, and formalizeth both sides to a farther opposition, and worketh an indisposition in mens minds

to be reunited: wherein no accusation is pretended; but I find in reason, that peace is best built upon a repetition of wrongs; and in example, that the speeches which have been made by the wisest men, "de concordia ordinum," have not abstained from reducing to memory the extremities used on both parts; so as it is true which is said, "Qui pacem tractat non repetitis conditionibus dissidii, is magis animos hominum dulcedine pacis fallit, quam æquitate componit."

And first of all, it is more than time that there were an end and surcease made of this immodest and deformed manner of writing lately entertained, whereby matter of religion is handled in the stile of the stage. Indeed, bitter and earnest writing must not hastily be condemned; for men cannot contend coldly, and without affection, about things which they hold dear and precious. A politic man may write from his brain without touch and sense of his heart; as in a speculation that appertaineth not unto him; but a feeling Christian will express in his words a character of zeal or love. The latter of which, as I could wish rather embraced, being more proper for these times, yet is the former warranted also by great examples.

But to leave all reverent and religious compassion towards evils, or indignation towards faults, and to turn religion into a comedy or satire; to search and rip up wounds with a laughing countenance, to intermix Scripture and scurrility sometimes in one sentence, is a thing far from the devout reverence of a Christian, and scant beseeming the honest regard of a sober man. "Non est major confusio, quam serii et joci." "There is no greater confusion than the confounding of jest and earnest." The majesty of religion, and the contempt and deformity of things ridiculous, are things as distant as things may be. Two principal causes have I ever known of atheism; curious controversies, and profane scoffing: now that these two are joined in one, no doubt that sect will make no small progression.

And here I do much esteem the wisdom and religion of that bishop which replied to the first pamphlet of this kind, who remembered that a fool was to be answered,

but not by becoming like unto him: and considered the matter which he handled, and not the person with whom he dealt.

Job, speaking of the majesty and gravity of a judge in himself, saith, "If I did smile, they believed it not:" as if he should have said, If I diverted, or glanced upon conceit of mirth, yet mens minds were so possessed with a reverence of the action in hand, as they could not receive it. Much more ought not this to be amongst bishops and divines disputing about holy things. And therefore as much do I mislike the invention of him who, as it seemeth, pleased himself in it as in no mean policy, that these men are to be dealt withal at their own weapons, and pledged in their own cup. This seemed to him as profound a device, as when the cardinal Sansovino counselled Julius the second to encounter the council of Pisa with the council of Lateran; or as lawful a challenge as Mr. Jewel made to confute the pretended catholics by the Fathers: but those things will not excuse the imitation of evil in another. It should be contrariwise with us, as Cæsar said, "Nil malo, quam eos similes esse sui, et me mei." But now, "Dum de bonis contendimus, de malis consentimus;" "while we differ about good things, we resemble in evil."

Surely, if I were asked of these men, who were the more to be blamed, I should percase remember the proverb, that the second blow maketh the fray, and the saying of an obscure fellow; "Qui replicat, multiplicat:" he that replieth, multiplieth. But I would determine the question with his sentence; "Alter principium malo dedit, alter modum abstulit;" "by the one means we have a beginning, and by the other we shall have none end."

And truly, as I do marvel that some of those preachers which call for reformation, whom I am far from wronging so far as to join them with these scoffers, do not publish some declaration, whereby they may satisfy the world, that they dislike their cause should be thus solicited; so I hope assuredly, that my lords of the clergy have none intelligence with this interlibelling, but do altogether disallow that their credit should be thus defended.

For though I observe in one of them many glosses, whereby the man would insinuate himself into their favours, yet I find it to be ordinary, that many pressing and fawning persons do misconjecture of the humours of men in authority, and many times, "Veneri immolant suem," "they seek to gratify them with that which they most dislike:" for I have great reason to satisfy myself touching the judgment of my lords the bishops in this matter, by that which was written by one of them, which I mentioned before with honour. Nevertheless I note, there is not an indifferent hand carried towards these pamphlets as they deserve; for the one sort flieth in the dark, and the other is uttered openly; wherein I might advise that side out of a wise writer, who hath set it down, that "punitis ingeniis gliscit auctoritas.

And indeed we see it ever falleth out, that the forbidden writing is always thought to be certain sparks of a truth that fly up into the faces of those that seek to choke it, and tread it out; whereas a book authorised is thought to be but *temporis voces*, the language of the time. But in plain truth I do find, to mine understanding, these pamphlets as meet to be suppressed as the other. First, because as the former sort doth deface the government of the Church in the persons of the bishops and prelates, so the other doth lead into contempt the exercises of religion in the persons of sundry preachers: so as it disgraceth an higher matter, though in the meaner person.

Next, I find certain indiscreet and dangerous amplifications, as if the civil government itself of this state had near lost the force of her sinews, and were ready to enter into some convulsion, all things being full of faction and disorder; which is as unjustly acknowledged, as untruly affirmed. I know his meaning is to enforce this irreverent and violent impugning of the government of bishops to be a suspected forerunner of a more general contempt. And I grant there is a sympathy between the estates; but no such matter in the civil policy, as deserveth so dishonourable a taxation.

To conclude this point: As it were to be wished that these writings had been abortive, and never seen the sun; so the next is, since they be come abroad, that they

be censured, by all that have understanding and conscience, as the intemperate extravagancies of some light persons. Yea farther, that men beware, except they mean to adventure to deprive themselves of all sense of religion, and to pave their own hearts, and make them as the high way, how they may be conversant in them, and much more how they delight in that vein; but rather to turn their laughing into blushing, and to be ashamed, as of a short madness, that they have in matters of religion taken their disport and solace. But this, perchance, is of these faults which will be soonest acknowledged; though I perceive, nevertheless, that there want not some who seek to blanch and excuse it.

But to descend to a sincere view and consideration of the accidents and circumstances of these controversies, wherein either part deserveth blame or imputation, I find generally, in causes of Church matters, that men do offend in some or all of these five points.

The first is, the giving occasion unto the controversies: and also the inconsiderate and ungrounded taking of occasion.

The next is, the extending and multiplying the controversies to a more general opposition or contradiction than appeareth at the first propounding of them, when mens judgments are least partial.

The third is, the passionate and unbrotherly practices and proceedings of both parts towards the persons each of others, for their discredit and suppression.

The fourth is, the courses holden and entertained on either side, for the drawing of their partisans to a more strait union within themselves, which ever importeth a farther distraction of the entire body.

The last is the undue and inconvenient propounding, publishing, and debating of the controversies. In which point the most palpable error hath been already spoken of, as that, which through the strangeness and freshness of the abuse first offereth itself to the conceits of all men.

Now concerning the occasion of the controversies, it cannot be denied, but that the imperfections in the conversation and government of those which have chief place

in the Church, have ever been principal causes and motives of schisms and divisions. For whilst the bishops and governors of the Church continue full of knowledge and good works; whilst they feed the flock indeed; whilst they deal with the secular states in all liberty and resolution, according to the majesty of their calling, and the precious care of souls imposed upon them, so long the Church is *situated* as it were *upon a hill;* no man maketh question of it, or seeketh to depart from it: but when these virtues in the fathers and leaders of the Church have lost their light, and that they wax worldly, lovers of themselves, and pleasers of men, then men begin to grope for the Church as in the dark; they are in doubt whether they be the successors of the apostles, or of the Pharisees; yea, howsoever they sit in Moses' chair, yet they can never speak, *tanquam auctoritatem habentes*, as having authority, because they have lost their reputation in the consciences of men, by declining their steps from the way which they trace out to others; so as men had need continually have sounding in their ears this same "Nolite exire," "go not out;" so ready are they to depart from the Church upon every voice. And therefore it is truly noted by one that writeth as a natural man, that the humility of the friars did, for a great time, maintain and bear out the irreligion of bishops and prelates.

For this is the double policy of the spiritual enemy, either by counterfeit holiness of life to establish and authorise errors; or by corruption of manners to discredit and draw in question truth and things lawful. This concerneth my lords the bishops, unto whom I am witness to myself, that I stand affected as I ought. No contradiction hath supplanted in me the reverence that I owe to their calling; neither hath any detraction or calumny imbased mine opinion of their persons. I know some of them, whose names are most pierced with these accusations, to be men of great virtues; although the indisposition of the times, and the want of correspondence many ways, is enough to frustrate the best endeavours in the edifying of the Church. And for the rest, generally, I can condemn none. I am no judge of

them that belong to so high a Master; neither have I *two witnesses*. And I know it is truly said of fame, that

———Pariter facta, atque infecta canebat.

Their taxations arise not all from one coast; they have many and different enemies ready to invent slander, more ready to amplify it, and most ready to believe it. And "Magnes mendacii credulitas;" "credulity is the adamant of lies." But if any be, against whom the Supreme Bishop hath not a few things, but many things; if any have lost his first love; if any be neither hot nor cold; if any have stumbled too fondly at the threshold, in such sort that he cannot sit well, that entered ill; it is time they return whence they are fallen, and confirm the things that remain.

Great is the weight of this fault; "et eorum causa abhorrebant homines a sacrificio Domini:" "and for their cause did men abhor the adoration of God." But howsoever it be, those which have sought to deface them, and cast contempt upon them, are not to be excused.

It is the precept of Solomon, that the rulers be not reproached; no, not in our thought: but that we draw our very conceit into a modest interpretation of their doings. The holy angel would give no sentence of blasphemy against the common slanderer, but said, "Increpet te Dominus," "the Lord rebuke thee." The Apostle St. Paul, though against him that did pollute sacred justice with tyrannous violence, did justly denounce the judgment of God, saying, "Percutiet te Dominus," "the Lord will strike thee;" yet in saying "paries dealbate," he thought he had gone too far, and retracted it: whereupon a learned father said, "ipsum quamvis inane nomen, et umbram sacerdotis expavit."

The ancient councils and synods, as is noted by the ecclesiastical story, when they deprived any bishop, never recorded the offence; but buried it in perpetual silence: only Cham purchased his curse by revealing his father's disgrace; and yet a much greater fault is it to ascend from their person to their calling, and draw

that in question. Many good fathers spake rigorously and severely of the unworthiness of bishops; as if presently it did forfeit, and cease their office. One saith, "Sacerdotes nominamur, et non sumus," "we are called priests, but priests we are not." Another saith, "Nisi bonum opus amplectaris, episcopus esse non potes;" "except thou undertake the good work, thou canst not be a bishop;" yet they meant nothing less than to move doubt of their calling or ordination.

The second occasion of controversies, is the nature and humour of some men. The Church never wanteth a kind of persons, which love the salutation of *Rabbi*, master; not in ceremony or compliment, but in an inward authority which they seek over mens minds, in drawing them to depend upon their opinions, and to seek knowledge at their lips. These men are the true successors of Diotrephes, the lover of pre-eminence, and not lord bishops. Such spirits do light upon another sort of natures, which do adhere to these men; "quorum gloria in obsequio;" stiff followers, and such as zeal marvellously for those whom they have chosen for their masters. This latter sort, for the most part, are men of young years, and superficial understanding, carried away with partial respects of persons, or with the enticing appearance of godly names and pretences; "Pauci res ipsas sequuntur, plures nomina rerum, plurimi nomina magistrorum:" "few follow the things themselves, more the names of the things, and most the names of their masters."

About these general affections are wreathed and interlaced accidental and private emulations and discontentments, all which together break forth into contentions; such as either violate truth, sobriety, or peace. These generalities apply themselves. The universities are the seat or the continent of this disease, whence it hath been, and is derived into the rest of the realm. There men will no longer be *e numero*, of the number. There do others side themselves before they know their right hand from their left: so it is true which is said, "transeunt ab ignorantia ad præjudicium," "they skip from ignorance to prejudicate opinion," and never take a sound

judgment in their way. But as it is well noted, "inter juvenile judicium et senile præjudicium, omnis veritas corrumpitur:" through want of years, when men are not indifferent, but partial, then their judgment is weak and unripe; and when it groweth to strength and ripeness, by that time it is forestalled with such a number of prejudicate opinions, as it is made unprofitable: so as between these two all truth is corrupted. In the mean while, the honourable names of sincerity, reformation, and discipline are put in the fore-ward: so as contentions and evil zeals cannot be touched, except these holy things be thought first to be violated. But howsoever they shall infer the solicitation for the peace of the Church to proceed from carnal sense, yet I will conclude ever with the apostle Paul, "Cum sit inter vos zelus et contentio, nonne carnales estis?" "While there is amongst you zeal and contention, are ye not carnal?" And howsoever they esteem the compounding of controversies to savour of man's wisdom and human policy, and think themselves led by the wisdom which is from above, yet I say, with St. James, "Non est ista sapientia de sursum descendens, sed terrena, animalis, diabolica: ubi enim zelus et contentio, ibi inconstantia et omne opus pravum." Of this inconstancy it is said by a learned father, "Procedere volunt non ad perfectionem, sed ad permutationem;" "they seek to go forward still, not to perfection, but to change."

The third occasion of controversies I observe to be, an extreme and unlimited detestation of some former heresy or corruption of the Church already acknowledged and convicted. This was the cause that produced the heresy of Arius, grounded especially upon detestation of Gentilism, lest the Christian should seem, by the assertion of the equal divinity of our Saviour Christ, to approach unto the acknowledgment of more gods than one. The detestation of the heresy of Arius produced that of Sabellius; who, holding for execrable the dissimilitude which Arius pretended in the Trinity, fled so far from him, as he fell upon that other extremity, to deny the distinction of persons; and to say, they were but only names of several offices and dispensations.

Yea, most of the heresies and schisms of the Church have sprung up of this root; while men have made it as it were their scale, by which to measure the bounds of the most perfect religion; taking it by the farthest distance from the error last condemned. These be "posthumi hæresium filii;" heresies that arise out of the ashes of other heresies that are extinct and amortised.

This manner of apprehension doth in some degree possess many in our times. They think it the true touchstone to try what is good and evil, by measuring what is more or less opposite to the institutions of the church of Rome, be it ceremony, be it policy, or government; yea, be it other institutions of greater weight, that is ever most perfect which is removed most degrees from that Church; and that is ever polluted and blemished, which participateth in any appearance with it. This is a subtile and dangerous conceit for men to entertain; apt to delude themselves, more apt to delude the people, and most apt of all to calumniate their adversaries. This surely, but that a notorious condemnation of that position was before our eyes, had long since brought us to the rebaptization of children baptized according to the pretended catholic religion: for I see that which is a matter of much like reason, which is the reordaining of priests, is a matter already resolutely maintained. It is very meet that men beware how they be abused by this opinion; and that they know, that it is a consideration of much greater wisdom and sobriety to be well advised, whether in general demolition of the institutions of the church of Rome, there were not, as mens actions are imperfect, some good purged with the bad, rather than to purge the Church, as they pretend, every day anew; which is the way to make a wound in the bowels, as is already begun.

The fourth and last occasion of these controversies, a matter which did also trouble the Church in former times, is the partial affectation and imitation of foreign churches. For many of our men, during the time of persecution, and since, having been conversant in Churches abroad, and received a great impression of the form of government there ordained, have violently

sought to intrude the same upon our Church. But I answer, "Consentiamus in eo quod convenit, non in eo quod receptum est;" let us agree in this, that every church do that which is convenient for the state of itself, and not in particular customs. Although their churches had received the better form, yet many times it is to be sought, "non quod optimum, sed e bonis quid proximum;" "not that which is best, but of good things which is the best and readiest to be had." Our Church is not now to plant; it is settled and established. It may be, in civil states, a republic is a better policy than a kingdom: yet, God forbid that lawful kingdoms should be tied to innovate and make alterations. "Qui mala introducit, voluntatem Dei oppugnat revelatam in verbo; qui nova introducit, voluntatem Dei oppugnat revelatam in rebus;" "he that bringeth in evil customs, resisteth the will of God revealed in his word;" he that bringeth in new things, resisteth the will of God revealed in the things themselves. "Consule providentiam Dei, cum verbo Dei;" "take counsel of the providence of God, as well as of his word." Neither yet do I admit that their form, although it were possible and convenient, is better than ours, if some abuses were taken away. The parity and equality of ministers is a thing of wonderful great confusion, and so in an ordinary government by synods, which doth necessarily ensue upon the other.

It is hard in all causes, but especially in religion, when voices shall be numbered and not weighed: "Equidem," saith a wise father, "ut vere quod res est scribam, prorsus decrevi fugere omnem conventum episcoporum; nullius enim concilii bonum exitum unquam vidi; concilia enim non minuunt mala, sed augent potius:" "To say the truth, I am utterly determined never to come to any council of bishops: for I never yet saw good end of any council; for councils abate not ill things, but rather increase them." Which is to be understood not so much of general councils as of synods, gathered for the ordinary government of the Church. As for the deprivation of bishops, and such like causes, this mischief hath taught the use of archbishops, patriarchs, and primates; as the abuse of them since hath taught men to mislike them.

But it will be said, Look to the fruits of the churches abroad and ours. To which I say, that I beseech the Lord to multiply his blessings and graces upon those churches an hundred fold. But yet it is not good, that we fall on the numbering of them; it may be our peace hath made us more wanton: it may be also, though I would be loth to derogate from the honour of those churches, were it not to remove scandals, that their fruits are as torches in the dark, which appear greatest afar off. I know they may have some strict orders for the repressing of sundry excesses: but when I consider of the censures of some persons, as well upon particular men as upon churches, I think on the saying of a Platonist, who saith, "Certe vitia irascibilis partis animæ sunt gradu praviora, quam concupiscibilis, tametsi occultiora;" a matter that appeared much by the ancient contentions of bishops. God grant that we may contend with other churches, as the vine with the olive, which of us shall bear the best fruit; and not as the brier with the thistle, which of us is most unprofitable. And thus much touching the occasions of these controversies.

Now, briefly to set down the growth and progression of the controversies; whereby will be verified the saying of Solomon, that "the course of contention is to be stopped at the first; being else as the waters, which if they gain a breach, it will hardly ever be recovered."

It may be remembered, that on that part, which calls for reformation, was first propounded some dislike of certain ceremonies supposed to be superstitious; some complaint of dumb ministers who possess rich benefices; and some invectives against the idle and monastical continuance within the universities, by those who had livings to be resident upon; and such like abuses. Thence they went on to condemn the government of bishops as an hierarchy remaining to us of the corruptions of the Roman church, and to except to sundry institutions in the Church, as not sufficiently delivered from the pollutions of former times. And lastly, they are advanced to define of an only and perpetual form of policy in the Church; which, without consi-

deration of possibility, and foresight of peril, and perturbation of the Church and State, must be erected and planted by the magistrate. Here they stay. Others, not able to keep footing in so steep ground, descend farther; That the same must be entered into and accepted of the people, at their peril, without the attending of the establishment of authority. And so in the mean time they refuse to communicate with us, reputing us to have no Church. This has been the progression of that side: I mean of the generality. For, I know, some persons, being of the nature, not only to love extremities, but also to fall to them without degrees, were at the highest strain at the first.

The other part, which maintaineth the present government of the Church, hath not kept one tenor neither. First, those ceremonies which were pretended to be corrupt, they maintained to be things indifferent, and opposed the examples of the good times of the Church to that challenge which was made unto them, because they were used in the later superstitious times. Then were they also content mildly to acknowledge many imperfections in the Church: as tares come up amongst the corn; which yet, according to the wisdom taught by our Saviour, were not with strife to be pulled up, lest it might spoil and supplant the good corn, but to grow on together till the harvest. After, they grew to a more absolute defence and maintenance of all the orders of the Church, and stiffly to hold, that nothing was to be innovated; partly because it needed not, partly because it would make a breach upon the rest. Hence, exasperated through contentions, they are fallen to a direct condemnation of the contrary part, as of a sect. Yea, and some indiscreet persons have been bold in open preaching to use dishonourable and derogatory speech and censure of the churches abroad; and that so far, as some of our men, as I have heard, ordained in foreign parts, have been pronounced to be no lawful ministers. Thus we see the beginnings were modest, but the extremes are violent; so as there is almost as great a distance now of either side from itself, as was at the first of one from the other. And surely, though my meaning

and scope be not, as I said before, to enter into the controversies themselves, yet I do admonish the maintainers of the above-named discipline, to weigh and consider seriously and attentively, how near they are unto them, with whom, I know, they will not join. It is very hard to affirm, that the discipline, which they say we want, is one of the essential parts of the worship of God; and not to affirm withal, that the people themselves, upon peril of salvation, without staying for the magistrate, are to gather themselves into it. I demand, If a civil state should receive the preaching of the word and baptism, and interdict and exclude the sacrament of the Lord's supper, were not men bound upon danger of their souls to draw themselves to congregations, wherein they might celebrate this mystery, and not to content themselves with that part of God's worship which the magistrate had authorised? This I speak, not to draw them into the mislike of others, but into a more deep consideration of themselves: "Fortasse non redeunt, quia suum progressum non intelligunt."

Again, to my lords the bishops I say, that it is hard for them to avoid blame, in the opinion of an indifferent person, in standing so precisely upon altering nothing: "leges, novis legibus non recreatæ, acescunt;" "laws, not refreshed with new laws, wax sour." "Qui mala non permutat, in bonis non perseverat:" "without change of ill, a man cannot continue the good." To take away many abuses, supplanteth not good orders, but establisheth them. "Morosa moris retentio, res turbulenta est, æque ac novitas;" "a contentious retaining of custom is a turbulent thing, as well as innovation. A good husband is ever pruning in his vineyard or his field; not unseasonably, indeed, not unskilfully, but lightly; he findeth ever somewhat to do. We have heard of no offers of the bishops of bills in parliament; which, no doubt, proceeding from them to whom it properly belongeth, would have every where received acceptation. Their own constitutions and orders have reformed them little. Is nothing amiss? Can any man defend the use of excommunication as a base process to lackey up and down for duties and fees; it being a precursory judgment of the latter day?

Is there no mean to train and nurse up ministers? for the yield of the universities will not serve, though they were never so well governed; to train them, I say, not to preach, for that every man confidently adventureth to do, but to preach soundly, and to handle the Scriptures with wisdom and judgment? I know prophesying was subject to great abuse, and would be more abused now; because heat of contentions is increased: but I say the only reason of the abuse was, because there was admitted to it a popular auditory; and it was not contained within a private conference of ministers. Other things might be spoken of. I pray God to inspire the bishops with a fervent love and care of the people; and that they may not so much urge things in controversy, as things out of controversy, which all men confess to be gracious and good. And thus much for the second point.

Now, as to the third point, of unbrotherly proceeding on either part, it is directly contrary to my purpose to amplify wrongs: it is enough to note and number them; which I do also, to move compassion and remorse on the offending side, and not to animate challengers and complaints on the other. And this point, as reason is, doth chiefly touch that side which can do most: "Injuriæ potentiorum sunt;" "injuries come from them that have the upper hand."

The wrongs of them which are possessed of the government of the Church towards the other, may hardly be dissembled or excused: they have charged them as though they denied tribute to Cæsar, and withdrew from the civil magistrate the obedience which they have ever performed and taught. They have sorted and coupled them with the "Family of love," whose heresies they have laboured to destroy and confute. They have been swift of credit to receive accusations against them, from those that have quarrelled with them, but for speaking against sin and vice. Their accusations and inquisitions have been strict, swearing men to blanks and generalities, not included within compass of matter certain, which the party which is to take the oath may comprehend, which is a thing captious and strainable. Their

urging of subscription to their own articles, is but " lacessere, et irritare morbos Ecclesiæ," which otherwise would spend and exercise themselves. " Non consensum quærit sed dissidium, qui, quod factis præstatur, in verbis exigit:" " He seeketh not unity, but division, which exacteth that in words, which men are content to yield in action." And it is true, there are some which, as I am persuaded, will not easily offend by inconformity, who notwithstanding make some conscience to subscribe; for they know this note of inconstancy and defection from that which they have long held, shall disable them to do that good which otherwise they might do: for such is the weakness of many, that their ministry should be thereby discredited. As for their easy silencing of them, in such great scarcity of preachers, it is to punish the people, and not them. Ought they not, I mean the bishops, to keep one eye open, to look upon the good that those men do, not to fix them both upon the hurt that they suppose cometh by them? Indeed, such as are intemperate and incorrigible, God forbid they should be permitted to preach: but shall every inconsiderate word, sometimes captiously watched, and for the most part hardly enforced, be as a forfeiture of their voice and gift in preaching? As for sundry particular molestations, I take no pleasure to recite them. If a minister shall be troubled for saying in baptism, " do you believe?" for, " dost thou believe?" If another shall be called in question for praying for her majesty, without the additions of her stile; whereas the very form of prayer in the book of Common-Prayer hath, " Thy servant Elizabeth," and no more: If a third shall be accused, upon these words uttered touching the controversies, " tollatur lex, et fiat certamen," (whereby was meant, that the prejudice of the law removed, either reasons should be equally compared,) of calling the people to sedition and mutiny, as if he had said, Away with the law, and try it out with force: If these and other like particulars be true, which I have but by rumour, and cannot affirm; it is to be lamented that they should labour amongst us with so little comfort. I know restrained governments are better than

remiss; and I am of his mind that said, "Better is it to live where nothing is lawful, than where all things are lawful." I dislike that laws should not be continued, or disturbers be unpunished: but laws are likened to the grape, that being too much pressed yields an hard and unwholesome wine. Of these things I must say; "Ira viri non operatur justitiam Dei;" "the wrath of man worketh not the righteousness of God."

As for the injuries of the other part, they be *ictus inermes;* as it were headless arrows; they be fiery and eager invectives, and, in some fond men, uncivil and irreverent behaviour towards their superiors. This last invention also, which exposeth them to derision and obloquy by libels, chargeth not, as I am persuaded, the whole side: neither doth that other, which is yet more odious, practised by the worst sort of them; which is, to call in, as it were to their aids, certain mercenary bands, which impugn bishops, and other ecclesiastical dignities, to have the spoil of their endowments and livings: of these I cannot speak too hardly. It is an intelligence between incendiaries and robbers, the one to fire the house, the other to rifle it.

The fourth point wholly pertaineth to them which impugn the present ecclesiastical government; who although they have not cut themselves off from the body and communion of the Church, yet do they affect certain cognisances and differences, wherein they seek to correspond amongst themselves, and to be separate from others. And it is truly said, "tam sunt mores quidam schismatici, quam dogmata schismatica;" "there be as well schismatical fashions as opinions." First, they have impropriated unto themselves the names of zealous, sincere, and reformed; as if all others were cold minglers of holy things and profane, and friends of abuses. Yea, be a man endued with great virtues, and fruitful in good works; yet if he concur not with them, they term him, in derogation, a civil and moral man, and compare him to Socrates, or some heathen philosopher: whereas the wisdom of the Scriptures teacheth us otherwise; namely, to judge and denominate men religious according to their works of the second table; because

they of the first are often counterfeit, and practised in hypocrisy. So St. John saith, that "a man doth vainly boast of loving God whom he never saw, if he love not his brother whom he hath seen." And St. James saith, "This is true religion, to visit the fatherless and the widow." So as that which is with them but philosophical and moral, is, in the apostle's phrase, "true religion and Christianity." As in affection they challenge the said virtues of zeal and the rest; so in knowledge they attribute unto themselves light and perfection. They say, the Church of England in King Edward's time, and in the beginning of her majesty's reign, was but in the cradle; and the bishops in those times did somewhat grope for day-break, but that maturity and fulness of light proceedeth from themselves. So Sabinius, bishop of Heraclea, a Macedonian heretic, said, that the fathers in the council of Nice were but infants and ignorant men: that the Church was not so perfect in their decrees as to refuse that farther ripeness of knowledge which time had revealed. And as they censure virtuous men by the names of civil and moral, so do they censure men truly and godly wise, who see into the vanity of their affections, by the name of politics; saying, that their wisdom is but carnal and savouring of man's brain. So likewise if a preacher preach with care and meditation, I speak not of the vain scholastical manner of preaching, but soundly indeed, ordering the matter he handleth distinctly for memory, deducting and drawing it down for direction, and authorising it with strong proofs and warrants, they censure it as a form of speaking not becoming the simplicity of the gospel, and refer it to the reprehension of St. Paul, speaking of the "enticing speech of man's wisdom."

Now for their own manner of preaching, what is it? Surely they exhort well, and work compunction of mind, and bring men well to the question, "Viri, fratres, quid faciemus?" But that is not enough, except they resolve the question. They handle matters of controversy weakly, and *obiter*, and as before a people that will accept of any thing. In doctrine of manners there is little but generality and repetition. The word, the

bread of life, they toss up and down, they break it not: they draw not their directions down *ad casus conscientiæ;* that a man may be warranted in his particular actions whether they be lawful or not; neither indeed are many of them able to do it, what through want of grounded knowledge, what through want of study and time. It is a compendious and easy thing to call for the observation of the sabbath-day, or to speak against unlawful gain; but what actions and works may be done upon the sabbath, and what not; and what courses of gain are lawful, and in what cases: to set this down, and to clear the whole matter with good distinctions and decisions, is a matter of great knowledge and labour, and asketh much meditation and conversing in the Scriptures, and other helps which God hath provided and preserved for instruction.

Again, they carry not an equal hand in teaching the people their lawful liberty, as well as their restraints and prohibitions: but they think a man cannot go too far in that that hath a shew of a commandment.

They forget that there are sins on the right hand, as well as on the left; and that the word is double-edged, and cutteth on both sides, as well the profane transgressions as the superstitious observances. Who doubteth but that it is as unlawful to shut where God hath opened, as to open where God hath shut; to bind where God hath loosed, as to loose where God hath bound? Amongst men it is commonly as ill taken to turn back favours, as to disobey commandments. In this kind of zeal, for example, they have pronounced generally, and without difference, all untruths unlawful; notwithstanding that the midwives are directly reported to have been blessed for their excuse; and Rahab is said by faith to have concealed the spies; and Solomon's selected judgment proceeded upon a simulation; and our Saviour, the more to touch the hearts of the two disciples with an holy dalliance, made as if he would have passed Emmaus. Farther, I have heard some sermons of mortification, which, I think, with very good meaning, they have preached out of their own experience and exercise, and things in private counsels

not unmeet; but surely no sound conceits, much like to Parsons' *Resolution*, or not so good; apt to breed in men rather weak opinions and perplexed despairs, than filial and true repentance which is sought.

Another point of great inconvenience and peril, is to entitle the people to hear controversies, and all kinds of doctrine. They say no part of the counsel of God is to be suppressed, nor the people defrauded: so as the difference which the Apostle maketh between milk and strong meat is confounded: and his precept, that the weak be not admitted unto questions and controversies, taketh no place.

But most of all is to be suspected, as a seed of farther inconvenience, their manner of handling the Scriptures; for whilst they seek express Scripture for every thing; and that they have, in a manner, deprived themselves and the Church of a special help and support, by embasing the authority of the fathers, they resort to naked examples, conceited inferences, and forced allusions, such as do mine into all certainty of religion.

Another extremity, is the excessive magnifying of that, which though it be a principal and most holy institution, yet hath its limits, as all things else have. We see wheresoever, in a manner, they find in the Scriptures the word spoken of, they expound it of preaching; they have made it, in a manner, of the essence of the sacrament of the Lord's supper, to have a sermon precedent; they have, in a sort, annihilated the use of liturgies, and forms of divine service, although the house of God be denominated of the principal, "domus orationis," "a house of prayer," and not a house of preaching. As for the life of the good monks and hermits in the primitive Church, I know, they will condemn a man as half a papist, if he should maintain them as other than profane, because they heard no sermons. In the mean time, what preaching is, and who may be said to preach, they move no question; but, as far as I see, every man that presumeth to speak in chair, is accounted a preacher. But I am assured, that not a few that call hotly for a preaching ministry, deserve to

be the first themselves that should be expelled. All which errors and misproceedings they do mortify and intrench by an addicted respect to their own opinions, and an impatience to hear contradiction or argument; yea, I know some of them that would think it a tempting of God, to hear or read what may be said against them; as if there could be a *quod bonum est, tenete;* without an *omnia probate,* going before.

This may suffice to offer unto themselves a thought and consideration, whether in these things they do well or no? and to correct and assuage the partiality of their followers. For as for any man that shall hereby enter into a contempt of their ministry, it is but his own hardness of heart. I know the work of exhortation doth chiefly rest upon these men, and they have zeal and hate of sin: But again, let them take heed that it be not true which one of their adversaries said, that they have but two small wants, knowledge, and love. And so I conclude this point.

The last point, touching the due publishing and debating of these controversies, needeth no long speech. This strange abuse of antiques and pasquils hath been touched before: so likewise I repeat that which I said, that a character of love is more proper for debates of this nature, than that of zeal. As for all direct or indirect glances, or levels at mens persons, they were ever in these causes disallowed.

Lastly, whatsoever be pretended, the people is no meet arbitrator, but rather the quiet, modest, and private assemblies, and conferences of the learned. "Qui apud incapacem loquitur, non disceptat, sed calumniatur." The press and pulpit would be freed and discharged of these contentions; neither promotion on the one side, nor glory and heat on the other side, ought to continue those challenges and cartels at the cross and other places; but rather all preachers, especially such as be of good temper, and have wisdom with conscience, ought to inculcate and beat upon a peace, silence, and surseance. Neither let them fear Solon's law, which compelled in factions every particular person to range himself on the one side; nor yet the fond calumny of neutrality; but

let them know that is true which is said by a wise man, That neuters in contentions are either better or worse than either side.

These things have I in all sincerity and simplicity set down, touching the controversies which now trouble the Church of England: and that without all art and insinuation, and therefore not like to be grateful to either part: Notwithstanding, I trust what hath been said shall find a correspondence in their minds which are not embarked in partiality, and which love the whole better than a part; wherefore I am not out of hope that it may do good; at the least I shall not repent myself of the meditation.

CERTAIN CONSIDERATIONS

TOUCHING

THE BETTER PACIFICATION AND EDIFICATION

OF THE

CHURCH OF ENGLAND.

DEDICATED TO HIS MOST EXCELLENT MAJESTY.

THE unity of your Church, excellent Sovereign, is a thing no less precious than the union of your kingdoms; being both works wherein your happiness may contend with your worthiness. Having therefore presumed, not without your majesty's gracious acceptation, to say somewhat on the one, I am the more encouraged not to be silent in the other: the rather, because it is an argument that I have travelled in heretofore.[1] But Solomon commendeth a word spoken in season; and as our Saviour, speaking of the discerning of seasons, saith, "When you see a cloud rising in the west, you say it will be a shower:" so your Majesty's rising to this monarchy in the west parts of the world, doth promise a sweet and fruitful shower of many blessings upon this Church and commonwealth; a shower of that influence as the very first dews and drops thereof have already laid the storms and winds throughout Christendom; reducing the very face of Europe to a more peaceable and amiable countenance. But to the purpose.

It is very true, that these ecclesiastical matters are things not properly appertaining to my profession; which I was not so inconsiderate but to object to myself: but finding that it is many times seen that a man that standeth off, and somewhat removed from a plot of ground, doth better survey it and discover it than those which are upon it, I thought it not impossible, but that I, as a looker on, might cast mine eyes upon some things which the actors themselves, especially some

[1] Vide p. 483.

being interested, some led and addicted, some declared and engaged, did not or would not see. And that knowing in my conscience, whereto God beareth witness, that the things which I shall speak, spring out of no vein of popularity, ostentation, desire of novelty, partiality to either side, disposition to intermeddle, or any the like leaven; I may conceive hope, that what I want in depth of judgment may be countervailed in simplicity and sincerity of affection. But of all things this did most animate me; that I found in these opinions of mine, which I have long held and embraced, as may appear by that which I have many years since written of them, according to the proportion nevertheless of my weakness, a consent and conformity with that which your Majesty hath published of your own most Christian, most wise, and moderate sense, in these causes; wherein you have well expressed to the world, that there is infused in your sacred breast, from God, that high principle and position of government, That you ever hold the whole more dear than any part.

For who seeth not that many are affected, and give opinion in these matters, as if they had not so much a desire to purge the evil from the good, as to countenance and protect the evil by the good? Others speak as if their scope were only to set forth what is good, and not to seek what is possible; which is to wish, and not to propound. Others proceed as if they had rather a mind of removing than of reforming. But howsoever either side, as men, though excellent men, shall run into extremities; yet your Majesty, as a most wise, equal, and Christian moderator, is disposed to find out the golden mediocrity in the establishment of that which is sound, and in the reparation of that which is corrupt and decayed. To your princely judgment then I do in all humbleness submit whatsoever I shall propound, offering the same but as a mite into the treasury of your wisdom. For as the astronomers do well observe, that when three of the superior lights do meet in conjunction, it bringeth forth some admirable effects: so there being joined in your Majesty the light of nature, the light of learning, and, above all, the light of God's Holy Spirit;

it cannot be but your government must be as a happy constellation over the states of your kingdoms. Neither is there wanting to your Majesty that fourth light, which though it be but a borrowed light, yet is of singular efficacy and moment added to the rest, which is the light of a most wise and well compounded council; to whose honourable and grave wisdoms I do likewise submit whatsoever I shall speak, hoping that I shall not need to make protestation of my mind and opinion; That, until your Majesty doth otherwise determine and order, all actual and full obedience is to be given to ecclesiastical jurisdiction as it now standeth; and, when your Majesty hath determined and ordered, that every good subject ought to rest satisfied, and apply his obedience to your Majesty's laws, ordinances, and royal commandments; nor of the dislike I have of all immodest bitterness, peremptory presumption, popular handling, and other courses, tending rather to rumour and impression in the vulgar sort, than to likelihood of effect joined with observation of duty.

But before I enter into the points controverted, I think good to remove, if it may be, two opinions, which directly confront and oppone to reformation: the one bringing it to a nullity, and the other to an impossibility. The first is, that it is against good policy to innovate any thing in Church matters; the other, that all reformation must be after one platform.

For the first of these, it is excellently said by the prophet; "State super vias antiquas, et videte, quænam sit via recta et vera, et ambulate in ea." So as he doth not say, "State super vias antiquas, et ambulate in eis:" For it is true, that with all wise and moderate persons, custom and usage obtaineth that reverence, as it is sufficient matter to move them to make a stand, and to discover, and take a view; but it is no warrant to guide and conduct them: a just ground, I say, it is of deliberation, but not of direction. But on the other side, who knoweth not, that time is truly compared to a stream, that carrieth down fresh and pure waters into that salt sea of corruption which enviroueth all human actions? And therefore, if man shall

not by his industry, virtue, and policy, as it were with the oar, row against the stream and inclination of time; all institutions and ordinances, be they never so pure, will corrupt and degenerate. But not to handle this matter common-place like, I would only ask, why the civil state should be purged and restored by good and wholesome laws, made every third or fourth year in parliament assembled; devising remedies as fast as time breedeth mischief: and contrariwise the ecclesiastical state should still continue upon the dregs of time, and receive no alteration now for these five and forty years and more? If any man shall object, that if the like intermission had been used in civil causes also, the error had not been great: Surely the wisdom of the kingdom hath been otherwise in experience for three hundred years space at the least. But if it be said to me, that there is a difference between civil causes and ecclesiastical, they may as well tell me that churches and chapels need no reparations, though castles and houses do: whereas commonly, to speak truth, dilapidations of the inward and spiritual edifications of the Church of God are in all times as great as the outward and material. Sure I am that the very word and stile of reformation used by our Saviour, "ab initio non fuit sic," was applied to Church matters, and those of the highest nature, concerning the law moral.

Nevertheless, he were both unthankful and unwise, that would deny but that the Church of England, during the time of Queen Elizabeth, of famous memory, did flourish. If I should compare it with foreign churches, I would rather the comparison should be in the virtues, than, as some make it, in the defects; rather, I say, as between the vine and the olive, which should be most fruitful; and not as between the brier and the thistle, which should be most unprofitable. For that reverence should be used to the Church, which the good sons of Noah used to their father's nakedness; that is, as it were to go backwards, and to help the defects thereof, and yet to dissemble them. And it is to be acknowledged, that scarcely any Church, since the primitive Church, yielded, in like number of years and latitude

of country, a greater number of excellent preachers, famous writers, and grave governors. But for the discipline and orders of the Church, as many, and the chiefest of them, are holy and good; so yet, if St. John were to indite an epistle to the Church of England, as he did to them of Asia, it would sure have the clause; "habeo adversus te pauca." And no more for this point, saving, that as an appendix thereto, it is not amiss to touch that objection, which is made to the time, and not to the matter; pretending, that if reformation were necessary, yet it were not now seasonable at your Majesty's first entrance: yet Hippocrates saith, "Si quid moves, a principio move:" and the wisdom of all examples do shew, that the wisest princes, as they have ever been the most sparing in removing or alteration of servants and officers upon their coming in; so for removing of abuses and enormities, and for reforming of laws, and the policy of their states, they have chiefly sought to ennoble and commend their beginnings therewith; knowing that the first impression with people continueth long, and when mens minds are most in expectation and suspence, then are they best wrought and managed. And therefore it seemeth to me, that as the spring of nature, I mean the spring of the year, is the best time for purging and medicining the natural body, so the spring of kingdoms is the most proper season for the purging and rectifying of politic bodies.

There remaineth yet an objection, rather of suspicion than of reason; and yet such as I think maketh a great impression in the minds of very wise and well-affected persons; which is, that if way be given to mutation, though it be in taking away abuses, yet it may so acquaint men with sweetness of change, as it will undermine the stability even of that which is sound and good. This surely had been a good and true allegation in the ancient contentions and divisions between the people and the senate of Rome; where things were carried at the appetites of multitudes, which can never keep within the compass of any moderation; but these things being with us to have an orderly passage, under a king who hath a royal power and approved judgment, and

knoweth as well the measure of things as the nature of them; it is surely a needless fear. For they need not doubt but your majesty, with the advice of your council, will discern what things are intermingled like the tares amongst the wheat, which have their roots so enwrapped and entangled, as the one cannot be pulled up without endangering the other; and what are mingled, but as the chaff and the corn, which need but a fan to sift and sever them. So much therefore for the first point, of no reformation to be admitted at all.

For the second point, that there should be but one form of discipline in all churches, and that imposed by necessity of a commandment and prescript out of the word of God; it is a matter volumes have been compiled of, and therefore cannot receive a brief redargution. I for my part do confess, that in revolving the Scriptures I could never find any such thing: but that God had left the like liberty to the Church government, as he had done to the civil government; to be varied according to time, and place, and accidents, which nevertheless his high and divine providence doth order and dispose. For all civil governments are restrained from God unto the general grounds of justice and manners; but the policies and forms of them are left free: so that monarchies and kingdoms, senates and seignories, popular states, and communalties, are lawful, and where they are planted ought to be maintained inviolate.

So likewise in Church matters, the substance of doctrine is immutable; and so are the general rules of government: but for rites and ceremonies, and for the particular hierarchies, policies, and discipline of churches, they be left at large. And therefore it is good we return unto the ancient bounds of unity in the Church of God; which was, one faith, one baptism; and not, one hierarchy, one discipline; and that we observe the league of Christians, as it is penned by our Saviour; which is in substance of doctrine this: "He that is not with us, is against us:" but in things indifferent, and but of circumstance, this; "He that is not against us, is with us." In these things, so as the general rules be observed; that Christ's flock be fed; that there be a succession in

bishops and ministers, which are the prophets of the New Testament; that there be a due and reverent use of the power of the keys; that those that preach the gospel, live of the gospel; that all things tend to edification; that all things be done in order and with decency, and the like: the rest is left to the holy wisdom and spiritual discretion of the master builders and inferior builders in Christ's Church; as it is excellently alluded by that father that noted, that Christ's garment was without seam; and yet the Church's garment was of divers colours: and thereupon setteth down for a rule; "in veste varietas sit, scissura non sit."

In which variety, nevertheless, it is a safe and wise course to follow good examples and precedents; but then by the rule of imitation and example to consider not only which are best, but which are the likeliest; as namely, the government of the Church in the purest times of the first good emperors that embraced the faith. For the times of persecution, before temporal princes received our faith, as they were excellent times for doctrine and manners, so they be improper and unlike examples of outward government and policy. And so much for this point: now to the particular points of controversies, or rather of reformation.

CIRCUMSTANCES IN THE GOVERNMENT OF BISHOPS.

First, therefore, for the government of bishops, I for my part, not prejudging the precedents of other reformed churches, do hold it warranted by the word of God, and by the practice of the ancient Church in the better times, and much more convenient for kingdoms, than parity of ministers and government by synods. But then farther, it is to be considered, that the Church is not now to plant or build; but only to be pruned from corruption, and to be repaired and restored in some decays.

For it is worth the noting, that the Scripture saith, "Translato sacerdotio, necesse est ut et legis fiat translatio." It is not possible, in respect of the great and near sympathy between the state civil and the state

ecclesiastical, to make so main an alteration in the Church, but it would have a perilous operation upon the kingdoms; and therefore it is fit that controversy be in peace and silence.

But there be two circumstances in the administration of bishops, wherein, I confess, I could never be satisfied; the one, the sole exercise of their authority; the other, the deputation of their authority.

For the first, the bishop giveth orders alone, excommunicateth alone, judgeth alone. This seemeth to be a thing almost without example in good government, and therefore not unlikely to have crept in in the degenerate and corrupt times. We see the greatest kings and monarchs have their councils. There is no temporal court in England of the higher sort where the authority doth rest in one person. The king's bench, common-pleas, and the exchequer, are benches of a certain number of judges. The chancellor of England hath an assistance of twelve masters of the chancery. The master of the wards hath a council of the court: so hath the chancellor of the duchy. In the exchequer-chamber, the lord treasurer is joined with the chancellor and the barons. The masters of the requests are ever more than one. The justices of assize are two. The lord presidents in the North and in Wales have councils of divers. The star-chamber is an assembly of the king's privy council, aspersed with the lords spiritual and temporal: so as in courts the principal person hath ever either colleagues or assessors.

The like is to be found in other well-governed commonwealths abroad, where the jurisdiction is yet more dispersed; as in the court of parliament of France, and in other places. No man will deny but the acts that pass the bishop's jurisdiction are of as great importance as those that pass the civil courts: for mens souls are more precious than their bodies or goods; and so are their good names. Bishops have their infirmities, and have no exception from that general malediction which is pronounced against all men living, "Væ soli, nam si occideret," etc. Nay, we see that the first warrant in spiritual causes is directed to a number, "Dic Ecclesiæ;"

which is not so in temporal matters: and we see that in general causes of Church government, there are as well assemblies of all the clergy in councils, as of all the states in parliament. Whence should this sole exercise of jurisdiction come? Surely I do suppose, and, I think, upon good ground, that "ab initio non fuit ita;" and that the deans and chapters were councils about the sees and chairs of bishops at the first, and were unto them a presbytery or consistory; and intermeddled not only in the disposing of their revenues and endowments, but much more in jurisdiction ecclesiastical. But it is probable, that the deans and chapters stuck close to the bishops in matters of profit and the world, and would not lose their hold; but in matters of jurisdiction, which they accounted but trouble and attendance, they suffered the bishops to incroach and usurp; and so the one continueth, and the other is lost. And we see that the bishop of Rome, "fas enim et ab hoste doceri," and no question in that church the first institutions were excellent, performeth all ecclesiastical jurisdiction as in consistory.

And whereof consisteth this consistory, but of the parish-priests of Rome, which term themselves cardinals, "a cardinibus mundi;" because the bishop pretendeth to be universal over the whole world? And hereof again we see many shadows yet remaining: as, that the dean and chapter, *pro forma*, chooseth the bishop, which is the highest point of jurisdiction: and that the bishop, when he giveth orders, if there be any ministers casually present, calleth them to join with him in imposition of hands, and some other particulars. And therefore it seemeth to me a thing reasonable and religious, and according to the first institution, that bishops, in the greatest causes, and those which require a spiritual discerning, namely, in ordaining, suspending, or depriving ministers, in excommunication, being restored to the true and proper use, as shall be afterwards touched, in sentencing the validity of marriages and legitimations, in judging causes criminous, as simony, incest, blasphemy, and the like, should not proceed sole and unassisted: which point, as I understand it, is

a reformation that may be planted *sine strepitu*, without any perturbation at all: and is a matter which will give strength to the bishops, countenance to the inferior degrees of prelates or ministers, and the better issue or proceeding to those causes that shall pass.

And as I wish this strength given to the bishops by council, so it is not unworthy your majesty's consideration, whether you shall not think fit to give strength to the general council of your clergy, the convocation-house, which was then restrained when the state of the clergy was thought a suspected part of the kingdom, in regard of their late homage to the bishop of Rome; which state now will give place to none in their loyalty and devotion to your majesty.

For the second point, which is the deputation of their authority, I see no perfect and sure ground for that neither, being somewhat different from the examples and rules of government. The bishop exerciseth his jurisdiction by his chancellor and commissary official, etc. We see in all laws in the world, offices of confidence and skill cannot be put over, nor exercised by deputy, except it be especially contained in the original grant; and in that case it is doubtful. And for experience, there was never any chancellor of England made a deputy; there was never any judge in any court made a deputy. The bishop is a judge and of a high nature; whence cometh it that he should depute, considering that all trust and confidence, as was said, is personal and inherent; and cannot, nor ought not to be transposed? Surely, in this, again, "ab initio non fuit sic:" but it is probable that bishops when they gave themselves too much to the glory of the world, and became grandees in kingdoms, and great counsellors to princes, then did they delegate their proper jurisdictions, as things of too inferior a nature for their greatness: and then, after the similitude and imitation of kings and counts palatine, they would have their chancellors and judges.

But that example of kings and potentates giveth no good defence. For the reasons why kings administer by their judges, although themselves are supreme judges, are two: the one, because the offices of kings

are for the most part of inheritance; and it is a rule in all laws, that offices of inheritance are rather matters that ground in interest than in confidence: for as much as they may fall upon women, upon infants, upon lunatics and idiots, persons incapable to execute judicature in person; and therefore such offices by all laws might ever be exercised and administered by delegation. The second reason is, because of the amplitude of their jurisdictions; which is as great as either their birth-right from their ancestors, or their sword-right from God maketh it. And therefore if Moses, that was governor over no great people, and those collected together in a camp, and not scattered in provinces and cities, himself of an extraordinary spirit, was nevertheless not able to suffice and hold out in person to judge the people, but did, by the advice of Jethro approved from God, substitute elders and judges; how much more other kings and princes?

There is a third reason, likewise, though not much to the present purpose; and that is, that kings, either in respect of the commonwealth, or of the greatness of their own patrimonies, are usually parties in suits: and then their judges stand indifferent between them and the subject: but in the case of bishops, none of these reasons hold. For, first, their office is elective, and for life, and not patrimonial or hereditary; an office merely of confidence, science, and qualification. And for the second reason, it is true, that their jurisdiction is ample, and spacious; and that their time is to be divided between the labours as well in the word and doctrine, as in government and jurisdiction: but yet I do not see, supposing the bishops courts to be used incorruptly, and without any indirect course held to multiply causes for gain of fees, but that the bishop might very well, for causes of moment, supply his judicial function in his own person. For we see before our eyes, that one chancellor of England dispatcheth the suits in equity of the whole kingdom: which is not so much by reason of the excellency of that rare honourable person which now holdeth the place: but it was ever so, though more or less burdenous to the suitor, as the chancellor was more

or less able to give dispatch. And if hold be taken of that which was said before, that the bishop's labour in the word must take up a principal part of his time; so I may say again, that matters of state have ever taken up most of the chancellor's time; having been for the most part persons upon whom the kings of this realm have most relied for matters of counsel. And therefore there is no doubt but the bishop, whose circuit is less ample, and the causes in nature not so multiplying, with the help of references and certificates to and from fit persons, for the better ripening of causes in their mean proceedings, and such ordinary helps incident to jurisdiction, may very well suffice his office. But yet there is another help: for the causes that come before him are these: tithes, legacies, administrations, and other testamentary causes; causes matrimonial; accusations against ministers, tending to their suspension, deprivation, or degrading; simony, incontinency, heresy, blasphemy, breach of the sabbath, and other like causes of scandal. The first two of these, in my opinion, differ from the rest; that is, tithes and testaments: for those be matters of profit, and in their nature temporal; though, by a favour and connivance of the temporal jurisdiction, they have been allowed and permitted to the courts ecclesiastical; the one, to the end the clergy might sue for that that was their sustentation before their own judges; and the other, in a kind of piety and religion, which was thought incident to the performance of dead mens wills. And surely for these two the bishop, in my opinion, may with less danger discharge himself upon his ordinary judges. And I think likewise it will fall out, that those suits are in the greatest number. But for the rest, which require a spiritual science and discretion, in respect of their nature, or of the scandal, it were reason, in my opinion, there were no audience given but by the bishop himself; he being also assisted, as was touched before: but it were necessary also he were attended by his chancellor, or some others his officers being learned in the civil laws, for his better instruction in points of formality, or the courses of the court:

which if it were done, then were there less use of the official's court, whereof there is now so much complaint: and causes of the nature aforesaid being only drawn to the audience of the bishop, it would repress frivolous and prowling suits, and give a grave and incorrupt proceeding to such causes as shall be fit for the court.

There is a third point also, not of jurisdiction, but of form of proceeding, which may deserve reformation: the rather, because it is contrary to the laws and customs of this land and state, which though they do not rule those proceedings, yet may they be advised with for better directions; and that is the oath *ex officio;* whereby men are enforced to accuse themselves, and, that that is more, are sworn unto blanks, and not unto accusations and charges declared. By the law of England no man is bound to accuse himself. In the highest cases of treason, torture is used for discovery, and not for evidence. In capital matters, no delinquent's answer upon oath is required; no, not permitted. In criminal matters not capital, handled in the star-chamber, and in causes of conscience, handled in the chancery, for the most part grounded upon trust and secrecy, the oath of the party is required. But how? Where there is an accusation and an accuser, which we call bills of complaint, from which the complainant cannot vary, and out of the compass of the which the defendant may not be examined, exhibited unto the court, and by process notified unto the defendant. But to examine a man upon oath, out of the insinuation of fame, or out of accusations secret and undeclared, though it have some countenance from the civil law, yet it is so opposite *ex diametro* to the sense and course of the common law, as it may well receive some limitation.

CONCERNING THE LITURGY, THE CEREMONIES, AND SUBSCRIPTION.

For the liturgy, great respect and heed would be taken, lest by inveighing against the dumb ministry, due reverence be not withdrawn from the liturgy. For though the gift of preaching be far above that of reading; yet the action of the liturgy is as high and holy

as that of the sermon. It is said, "Domus mea domus orationis vocabitur:" "the house of prayer, not the house of preaching:" and whereas the Apostle saith, "How shall men call upon him, on whom they have not believed? And how shall they believe unless they hear? And how shall they hear, without a preacher?" it appeareth that as preaching is the more original, so prayer is the more final; as the difference is between the seed and the fruit; for the keeping of God's law, is the fruit of the teaching of the law; and prayer, or invocation, or divine service, or liturgy, for these be but varieties of terms, is the immediate hallowing of the name of God, and the principal work of the first table, and of the great commandment of the love of God. It is true that the preaching of the holy word of God is the sowing of the seed; it is the lifting up of the brazen serpent, the ministry of faith, and the ordinary means of salvation: but yet it is good to take example, how that the best actions of the worship of God may be extolled excessively and superstitiously. As the extolling of the sacrament bred the superstition of the mass; the extolling of the liturgy and prayers bred the superstition of the monastical orders and oraisons: and so no doubt preaching likewise may be magnified and extolled superstitiously, as if all the whole body of God's worship should be turned into an ear. So as none, as I suppose, of sound judgment, will derogate from the liturgy, if the form thereof be in all parts agreeable to the word of God, the example of the primitive Church, and that holy decency which St. Paul commendeth. And therefore, first, that there be a set form of prayer, and that it be not left either to an extemporal form, or to an arbitrary form. Secondly, that it consist as well of lauds, hymns, and thanksgivings, as of petitions, prayers, and supplications. Thirdly, that the form thereof be quickened with some shortness and diversities of prayers and hymns, and with some interchanges of the voice of the people, as well as of the minister. Fourthly, that it admit some distinctions of times, and commemorations of God's principal benefits, as well general as particular. Fifthly, that prayers likewise be appropriated to several necessi-

ties and occasions of the Church. Sixthly, that there be a form likewise of words and liturgy in the administration of the sacraments, and in the denouncing of the censures of the Church, and other holy actions and solemnities; these things, I think, will not be much controverted.

But for the particular exceptions to the liturgy in form as it now standeth, I think divers of them, allowing they were just, yet seem they not to be weighty; otherwise than that nothing ought to be counted light in matters of religion and piety; as the heathen himself could say, "etiam vultu sæpe læditur pietas." That the word, priest, should not be continued, especially with offence, the word, minister, being already made familiar. This may be said that it is a good rule in translation, never to confound that in one word in the translation, which is precisely distinguished in two words in the original, for doubt of equivocation and traducing. And therefore seeing the word πρεσβύτερος and ἱερεὺς be always distinguished in the original; and the one used for a sacrificer, the other for a minister; the word, priest, being made common to both, whatsoever the derivation be, yet in use it confoundeth the minister with the sacrificer. And for an example of this kind, I did ever allow the discretion and tenderness of the Rhemish translation in this point; that finding in the original the word ἀγάπη and never ἔρως, do ever translate charity, and never love, because of the indifferency and equivocation of the word with impure love.

Touching the absolution; it is not unworthy consideration, whether it may not be thought improper and unnecessary: for there are but two sorts of absolution; both supposing an obligation precedent; the one upon an excommunication, which is religious and primitive; the other upon confession and penance, which is superstitious, or at least positive; and both particular, and neither general. Therefore since the one is taken away, and the other hath its proper case, what doth a general absolution, wherein there is neither penance nor excommunication precedent? for the Church never looseth,

but where the Church hath bound. And surely I may think this at the first was allowed in a kind of spiritual discretion, because the Church thought the people could not be suddenly weaned from their conceit of assoiling, to which they had been so long accustomed.

For confirmation, to my understanding, the state of the question is, whether it be not a matter mistaken and altered by time; and whether that be not now made a subsequent to baptism, which was indeed an inducement to the communion. For whereas in the primitive Church children were examined of their faith before they were admitted to the communion, time may seem to have turned it to refer as if it had been to receive a confirmation of their baptism.

For private baptism by women, or lay persons, the best divines do utterly condemn it; andI hear it not generally defended; and I have often marvelled, that where the book in the preface to public baptism doth acknowledge that baptism in the practice of the primitive Church was anniversary, and but at certain times; which sheweth that the primitive Church did not attribute so much to the ceremony, as they would break an outward and general order for it; the book should afterwards allow of private baptism, as if the ceremony were of that necessity, as the very institution, which committed baptism only to the ministers, should be broken in regard of the supposed necessity. And therefore this point of all others I think was but a "Concessum propter duritiem cordis."

For the form of celebrating matrimony, the ring seemeth to many, even of vulgar sense and understanding, a ceremony not grave, especially to be made, as the words make it, the essential part of the action; besides, some other of the words are noted in speech to be not so decent and fit.

For music in churches; that there should be singing of psalms and spiritual songs, is not denied: so the question is *de modo;* wherein if a man will look attentively into the order and observation of it, it is easy to discern between the wisdom of the institution and the excess of the late times. For first there are no songs

or verses sung by the quire, which are not supposed by continual use to be so familiar with the people, as they have them without book, whereby the sound hurteth not the understanding: and those which cannot read upon the book, are yet partakers of the sense, and may follow it with their mind. So again, after the reading of the word, it was thought fit there should be some pause for holy meditation, before they proceeded to the rest of the service: which pause was thought fit to be filled rather with some grave sound, than with a still silence; which was the reason of the playing upon the organs after the Scriptures read: all which was decent and tending to edification. But then the curiosity of division and reports, and other figures of music, have no affinity with the reasonable service of God, but were added in the more pompous times.

For the cap and surplice, since they be things in their nature indifferent, and yet by some held superstitious; and that the question is between science and conscience, it seemeth to fall within the compass of the apostle's rule, which is, "that the stronger do descend and yield to the weaker." Only the difference is, that it will be materially said, that the rule holdeth between private man and private man; but not between the conscience of a private man, and the order of a Church. But yet since the question at this time is of a toleration, not by connivance, which may encourage disobedience, but by law, which may give a liberty; it is good again to be advised whether it fall not within the equity of the former rule: the rather, because the silencing of ministers by this occasion is, in this scarcity of good preachers, a punishment that lighteth upon the people as well as upon the party. And for the subscription, it seemeth to me in the nature of a confession, and therefore more proper to bind in the unity of faith, and to be urged rather for articles of doctrine, than for rites and ceremonies, and points of outward government. For howsoever politic considerations and reasons of state may require uniformity, yet Christian and divine grounds look chiefly upon unity.

TOUCHING A PREACHING MINISTRY.

To speak of a learned ministry: it is true that the worthiness of the pastors and ministers is of all other points of religion the most summary; I do not say the greatest, but the most effectual towards the rest: but herein, to my understanding, while men go on in zeal to hasten this work, they are not aware of as great or greater inconvenience, than that which they seek to remove. For while they inveigh against a dumb ministry, they make too easy and too promiscuous an allowance of such as they account preachers; having not respect enough to their learnings in other arts, which are handmaids to divinity; not respect enough to years, except it be in case of extraordinary gift; not respect enough to the gift itself, which many times is none at all. For God forbid, that every man that can take unto himself boldness to speak an hour together in a Church, upon a text, should be admitted for a preacher, though he mean never so well. I know there is a great latitude in gifts, and a great variety in auditories and congregations; but yet so as there is *aliquid infimum*, below which you ought not to descend. For you must rather leave the ark to shake as it shall please God, than put unworthy hands to hold it up. And when we are in God's temple, we are warned rather to "put our hands upon our mouth, than to offer the sacrifice of fools." And surely it may be justly thought, that amongst many causes of atheism, which are miserably met in our age; as schisms and controversies, prophane scoffings in holy matters, and others; it is not the least that divers do adventure to handle the word of God, which are unfit and unworthy. And herein I would have no man mistake me, as if I did extol curious and affected preaching; which is as much on the other side to be disliked, and breedeth atheism and scandal as well as the other: for who would not be offended at one that cometh into the pulpit, as if he came upon the stage to play parts or prizes? neither on the other side, as if I would discourage any who hath any tolerable gift.

But upon this point I ground three considerations: first, whether it were not requisite to renew that good exercise which was practised in this Church, some years, and afterwards put down by order indeed from the Church, in regard of some abuse thereof, inconvenient for those times; and yet against the advice and opinion of one of the greatest and gravest prelates of this land, and was commonly called prophesying; which was this: That the ministers within a precinct did meet upon a week-day in some principal town, where there was some ancient grave minister that was president, and an auditory admitted of gentlemen, or other persons of leisure. Then every minister successively, beginning with the youngest, did handle one and the same part of Scripture, spending severally some quarter of an hour or better, and in the whole some two hours: and so the exercise being begun and concluded with prayer, and the president giving a text for the next meeting, the assembly was dissolved. And this was, as I take it, a fortnight's exercise; which, in my opinion, was the best way to frame and train up preachers to handle the word of God as it ought to be handled, that hath been practised. For we see orators have their declamations, lawyers have their moots, logicians their sophisms; and every practice of science hath an exercise of erudition and initiation before men come to the life; only preaching, which is the worthiest, and wherein it is most danger to do amiss, wanteth an introduction, and is ventured and rushed upon at the first. But unto this exercise of the prophecy, I would wish these two additions: the one, that after this exercise, which is in some sort public, there were immediately a private meeting of the same ministers, where they might brotherly admonish the one the other, and especially the elder sort the younger, of any thing that had passed in the exercise, in matter or manner, unsound and uncomely; and in a word, might mutually use such advice, instruction, comfort or encouragement, as occasion might minister; for public reprehension were to be debarred. The other addition that I mean is, that the same exercise were used in the universities for young divines, before they presumed to preach, as well as in

the country for ministers. For they have in some colleges an exercise called a common-place; which can in no degree be so profitable, being but the speech of one man at one time. And if it be feared that it may be occasion to whet mens speeches for controversies, it is easily remedied, by some strict prohibition, that matters of controversy tending any way to the violating or disquieting the peace of the Church, be not handled or entered into; which prohibition, in regard there is ever to be a grave person president or moderator, cannot be frustrated. The second consideration is, whether it were not convenient there should be a more exact probation and examination of ministers: namely, that the bishops do not ordain alone, but by advice; and then that ancient holy order of the Church might be revived; by the which the bishop did ordain ministers but at four set times of the year; which were called "Quatuor tempora;" which are now called Ember-weeks: it being thought fit to accompany so high an action with general fasting and prayer, and sermons, and all holy exercises; and the names likewise of those that were to be ordained, were published some days before their ordination; to the end exceptions might be taken, if just cause were. The third consideration is, that if the case of the Church of England be, that were a computation taken of all the parochian churches, allowing the union of such as were too small and adjacent, and again a computation to be taken of the persons who were worthy to be pastors; and upon the said account if it fall out that there are many more churches than pastors, then of necessity recourse must be had to one of these remedies; either that pluralities must be allowed, especially if you can by permutation make the benefices more compatible; or that there be allowed preachers to have a more general charge, to supply and serve by turn parishes unfurnished: for that some churches should be provided of pastors able to teach, and others wholly destitute, seemeth to me to be against the communion of saints and Christians, and against the practice of the primitive Church.

TOUCHING THE ABUSE OF EXCOMMUNICATION.

Excommunication is the greatest judgment upon earth; being that which is ratified in heaven; and being a precursory or prelusory judgment of the great judgment of Christ in the end of the world. And therefore for this to be used irreverently, and to be made an ordinary process, to lackey up and down for fees, how can it be without derogation to God's honour, and making the power of the keys contemptible? I know very well the defence thereof, which hath no great force; that it issueth forth not for the thing itself, but for the contumacy. I do not deny, but this judgment is, as I said before, of the nature of God's judgments; of the which it is a model. For as the judgment of God taketh hold of the least sin of the impenitent, and taketh no hold of the greatest sin of the convert or penitent; so excommunication may in case issue upon the smallest offence, and in case not issue upon the greatest: but is this contumacy such a contumacy as excommunication is now used for? For the contumacy must be such as the party, as far as the eye and wisdom of the Church can discern, standeth in state of reprobation and damnation: as one that for that time seemeth given over to final impenitency. Upon this observation I ground two considerations: the one, that this censure be restored to the true dignity and use thereof; which is, that it proceed not but in causes of great weight; and that it be decreed not by any deputy or substitute of the bishop, but by the bishop in person; and not by him alone, but by the bishop assisted.

The other consideration is, that in lieu thereof, there be given to the ecclesiastical court some ordinary process, with such force and coercion as appertaineth; that so the dignity of so high a sentence being retained, and the necessity of mean process supplied, the Church may be indeed restored to the ancient vigour and splendour. To this purpose, joined with some other holy and good purposes, was there a bill drawn in parliament, in the three-and-twentieth year of the reign of the queen deceased;

which was the gravest parliament that I have known; and the bill recommended by the gravest counsellor of estate in parliament; though afterwards it was staid by the queen's special commandment, the nature of those times considered.

TOUCHING NON-RESIDENTS, AND PLURALITIES.

For non-residence, except it be in case of necessary absence, it seemeth an abuse drawn out of covetousness and sloth: for that men should live of the flock that they do not feed, or of the altar at which they do not serve, is a thing that can hardly receive just defence; and to exercise the office of a pastor, in matter of the word and doctrine, by deputies, is a thing not warranted, as hath been touched before. The questions upon this point do arise upon the cases of exception and excusation, which shall be thought reasonable and sufficient, and which not. For the case of chaplains, let me speak that with your Majesty's pardon, and with reverence towards the other peers and grave persons, whose chaplains by statutes are privileged: I should think, that the attendance which chaplains give to your Majesty's court, and in the houses and families of their lords, were a juster reason why they should have no benefice, than why they should be qualified to have two: for, as it standeth with Christian policy, that such attendance be in no wise neglected; because that good, which ensueth thereof to the Church of God, may exceed, or countervail that which may follow of their labours in any, though never so large a congregation; so it were reasonable that their maintenance should honourably and liberally proceed thence, where their labours be employed. Neither are there wanting in the Church dignities and preferments not joined with any exact cure of souls; by which, and by the hope of which, such attendants in ordinary, who ought to be, as for the most part they are, of the best gifts and sort, may be farther encouraged and rewarded. And as for extraordinary attendants, they may very well retain the grace and countenance of their places and duties at times

incident thereunto, without discontinuance or non-residence in their pastoral charges. Next for the case of intending studies in the universities, it will more easily receive an answer; for studies do but serve and tend to the practice of those studies: and therefore for that which is most principal and final to be left undone, for the attending of that which is subservient and subministrant, seemeth to be against proportion of reason. Neither do I see, but that they proceed right well in all knowledge, which do couple study with their practice; and do not first study altogether, and then practise altogether; and therefore they may very well study at their benefices. Thirdly, for the case of extraordinary service of the Church; as if some pastor be sent to a general council, or here to a convocation; and likewise for the case of necessity, as in the particular of infirmity of body, and the like, no man will contradict, but that there may be some substitution for such a time. But the general case of necessity is the case of pluralities; the want of pastors and insufficiency of livings considered, *posito*, that a man doth faithfully and incessantly divide his labours between two cures; which kind of necessity I come now to speak of in the handling of pluralities.

For pluralities, in case the number of able ministers were sufficient, and the value of benefices were sufficient, then pluralities were in no sort tolerable. But we must take heed, we desire not contraries. For to desire that every parish should be furnished with a sufficient preacher, and to desire that pluralities be forthwith taken away, is to desire things contrary; considering, *de facto*, there are not sufficient preachers for every parish: whereto add likewise, that there is not sufficient living and maintenance in many parishes to maintain a preacher; and it maketh the impossibility yet much the greater. The remedies *in rerum natura* are but three; union, permutation, and supply. Union of such benefices as have the living too small, and the parish not too great, and are adjacent. Permutation, to make benefices more compatible, though men be overruled to some loss in changing a better for a nearer.

Supply, by stipendiary preachers, to be rewarded with some liberal stipends, to supply, as they may, such places which are unfurnished of sufficient pastors: as queen Elizabeth, amongst other her gracious acts, did erect certain of them in Lancashire; towards which pensions, I see no reason but reading ministers, if they have rich benefices, should be charged.

TOUCHING THE PROVISION FOR SUFFICIENT MAINTENANCE IN THE CHURCH.

Touching Church-maintenance, it is well to be weighed what is *jure divino*, and what *jure positivo*. It is a constitution of the divine law, from which human laws cannot derogate, that those which feed the flock should live of the flock; that those that serve at the altar should live of the altar; that those which dispense spiritual things should reap temporal things; of which it is also an appendix, that the proportion of this maintenance be not small or necessitous, but plentiful and liberal. So then, that all the places and offices of the Church be provided of such a dotation, that they may be maintained, according to their several degrees, is a constitution permanent and perpetual: but for particularity of the endowment, whether it should consist of tithes, or lands, or pensions, or mixt, might make a question of convenience, but no question of precise necessity. Again, that the case of the Church *de facto* is such, that there is want in the Church of patrimony, is confessed. For the principal places, namely, the bishops livings, are in some particulars not sufficient; and therefore enforced to be supplied by toleration of Commendams, things of themselves unfit, and ever held of no good report. And as for the benefices and pastors places, it is manifest that very many of them are very weak and penurious. On the other side, that there was a time when the Church was rather burdened with superfluity, than with lack, that is likewise apparent; but it is long since; so as the fault was in others, the want redoundeth unto us. Again, that it were to be wished that impropriations were returned to the Church

as the most proper and natural endowments thereof, is a thing likewise wherein mens judgments will not much vary. Nevertheless, that it is an impossibility to proceed now, either to their resumption or redemption, is as plain on the other side. For men are stated in them by the highest assurance of the kingdom, which is, act of parliament; and the value of them amounteth much above ten subsidies; and the restitution must of necessity pass their hands, in whose hands they are now in possession or interest.

But of these things which are manifestly true, to infer and ground some conclusions. First, in mine own opinion and sense, I must confess, let me speak it with reverence, that all the parliaments since 27 and 31 of Henry VIII. who gave away impropriations from the Church, seem to me to stand in a sort obnoxious, and obliged to God in conscience to do somewhat for the Church, to reduce the patrimony thereof to a competency. For since they have debarred Christ's wife of a great part of her dowry, it were reason they made her a competent jointure. Next to say, that impropriations should be only charged, that carrieth neither possibility nor reason. Not possibility, for the reasons touched before: not reason, because if it be conceived, that if any other person be charged, it should be a re-charge, or double charge, inasmuch as he payeth tithes already, that is a thing mistaken. For it must be remembered, that as the realm gave tithes to the Church, so the realm since again hath given tithes away from the Church unto the king, as they may give their eighth sheaf or ninth sheaf. And therefore the first gift being evacuated, it cannot go in defeasance or discharge of that perpetual bond, wherewith men are bound to maintain God's ministers. And so we see in example, that divers godly and well disposed persons, not impropriators, are content to increase their preachers livings; which, though in law it be but a benevolence, yet before God it is a conscience. Farther, that impropriation should not be somewhat more deeply charged than other revenues of like value, methinks, cannot well be denied, both in regard of the ancient claim of the Church, and the intention of the

first giver: and again, because they have passed in valuation between man and man somewhat at the less rate, in regard of the said pretence or claim of the Church in conscience before God. But of this point, touching Church-maintenance, I do not think fit to enter into farther particularity, but reserve the same to a fitter time.

Thus have I in all humbleness and sincerity of heart, to the best of my understanding, given your Majesty tribute of my cares and cogitations in this holy business, so highly tending to God's glory, your Majesty's honour, and the peace and welfare of your states: insomuch as I am persuaded that the papists themselves should not need so much the severity of penal laws, if the sword of the Spirit were better edged, by strengthening the authority, and suppressing the abuses in the Church.

To conclude, renewing my most humble submission of all that I have said to your Majesty's most high wisdom, and again, most humbly craving pardon for any errors committed in this writing; which the same weakness of judgment that suffered me to commit them, would not suffer me to discover them, I end with my devout and fervent prayer to God, that as he hath made your Majesty the corner-stone, in joining your two kingdoms, so you may be also as a corner-stone to unite and knit together these differences in the Church of God; to whose heavenly grace and never-erring direction, I commend your Majesty's sacred person, and all your doings.

THE

TRANSLATION

OF CERTAIN

PSALMS

INTO

ENGLISH VERSE.

BY THE

RIGHT HONOURABLE FRANCIS LORD VERULAM,
VISCOUNT ST. ALBAN.

Printed at London, 1625, in Quarto.

TO HIS VERY GOOD FRIEND,

MR. GEORGE HERBERT.

THE pains * that it pleased you to take about some of my writings, I cannot forget; which did put me in mind to dedicate to you this poor exercise of my sickness. Besides, it being my manner for dedications, to choose those that I hold most fit for the argument, I thought, that in respect of divinity and poesy met, whereof the one is the matter, the other the stile of this little writing, I could not make better choice: so, with signification of my love and acknowledgment, I ever rest

Your affectionate Friend,

FR. ST. ALBAN.

* Of translating part of the Advancement of Learning into Latin.

THE TRANSLATION OF THE FIRST PSALM.

Who never gave to wicked reed
A yielding and attentive ear;
Who never sinners paths did tread,
Nor sat him down in scorner's chair;
But maketh it his whole delight
On law of God to meditate;
And therein spendeth day and night:
That man is in a happy state.

He shall be like the fruitful tree,
Planted along a running spring,
Which, in due season, constantly
A goodly yield of fruit doth bring:
Whose leaves continue always green,
And are no prey to winter's pow'r:
So shall that man not once be seen
Surprised with an evil hour.

With wicked men it is not so,
Their lot is of another kind:
All as the chaff, which to and fro
Is toss'd at mercy of the wind.
And when he shall in judgment plead,
A casting sentence bide he must:
So shall he not lift up his head
In the assembly of the just.

For why? the Lord hath special eye
To be the godly's stay at call:
And hath given over, righteously,
The wicked man to take his fall.

THE TRANSLATION OF THE XIIth PSALM.

Help, Lord, for godly men have took their flight,
And left the earth to be the wicked's den:
Not one that standeth fast to truth and right,
But fears, or seeks to please, the eyes of men.
When one with other falls in talk apart,
Their meaning go'th not with their words, in proof,
But fair they flatter, with a cloven heart,
By pleasing words, to work their own behoof.

But God cut off the lips, that are all set
To trap the harmless soul, that peace hath vow'd;
And pierce the tongues, that seek to counterfeit
The confidence of truth, by lying loud:
Yet so they think to reign, and work their will
By subtile speech, which enters ev'ry where;
And say: Our tongues are ours, to help us still;
What need we any higher pow'r to fear?

Now for the bitter sighing of the poor,
The Lord hath said, I will no more forbear
The wicked's kingdom to invade and scour,
And set at large the men restrain'd in fear.
And sure the word of God is pure and fine,
And in the trial never loseth weight;
Like noble gold, which, since it left the mine,
Hath seven times passed through the fiery strait.

And now thou wilt not first thy word forsake,
Nor yet the righteous man that leans thereto;
But wilt his safe protection undertake,
In spite of all their force and wiles can do.
And time it is, O Lord, thou didst draw nigh;
The wicked daily do enlarge their bands;
And that which makes them follow ill a vie,
Rule is betaken to unworthy hands.

THE TRANSLATION OF THE XCth PSALM.

O Lord, thou art our home, to whom we fly,
And so hast always been from age to age:
Before the hills did intercept the eye,
Or that the frame was up of earthly stage,
One God thou wert, and art, and still shalt be;
The line of time, it doth not measure thee.

Both death and life obey thy holy lore,
And visit in their turns, as they are sent;
A thousand years with thee they are no more
Than yesterday, which, ere it is, is spent:
Or as a watch by night, that course doth keep,
And goes, and comes, unwares to them that sleep.

Thou carry'st man away as with a tide:
Then down swim all his thoughts that mounted high:
Much like a mocking dream, that will not bide,
But flies before the sight of waking eye;
Or as the grass, that cannot term obtain,
To see the summer come about again.

At morning, fair it musters on the ground;
At ev'n it is cut down, and laid along:
And though it spared were, and favour found,
The weather would perform the mower's wrong:
Thus hast thou hang'd our life on brittle pins,
To let us know it will not bear our sins.

Thou bury'st not within oblivion's tomb
Our trespasses, but ent'rest them aright;
Ev'n those that are conceiv'd in darkness' womb,
To thee appear as done at broad day-light.
As a tale told, which sometimes men attend,
And sometimes not, our life steals to an end.

The life of man is threescore years and ten,
Or, if that he be strong, perhaps fourscore;
Yet all things are but labour to him then,
New sorrows still come on, pleasures no more.
Why should there be such turmoil and such strife,
To spin in length this feeble line of life?

But who considers duly of thine ire?
Or doth the thoughts thereof wisely embrace?
For thou, O God, art a consuming fire:
Frail man, how can he stand before thy face?
If thy displeasure thou dost not refrain,
A moment brings all back to dust again.

Teach us, O Lord, to number well our days,
Thereby our hearts to wisdom to apply;
For that which guides man best in all his ways,
Is meditation of mortality.
This bubble light, this vapour of our breath,
Teach us to consecrate to hour of death.

Return unto us, Lord, and balance now,
With days of joy, our days of misery;
Help us right soon, our knees to thee we bow,
Depending wholly on thy clemency;
Then shall thy servants both with heart and voice,
All the days of their life in thee rejoice.

Begin thy work, O Lord, in this our age,
Shew it unto thy servants that now live;
But to our children raise it many a stage,
That all the world to thee may glory give.
Our handy-work likewise, as fruitful tree,
Let it, O Lord, blessed, not blasted be.

THE TRANSLATION OF THE CIVth PSALM.

FATHER and King of pow'rs, both high and low,
Whose sounding fame all creatures serve to blow;
My soul shall with the rest strike up thy praise,
And carol of thy works and wondrous ways.
But who can blaze thy beauties, Lord, aright?
They turn the brittle beams of mortal sight.
Upon thy head thou wear'st a glorious crown,
All set with virtues, polish'd with renown:
Thence round about a silver veil doth fall
Of crystal light, mother of colours all.
The compass heav'n, smooth without grain, or fold,
All set with spangs of glitt'ring stars untold,
And strip'd with golden beams of power unpent,
Is raised up for a removing tent.
Vaulted and arched are his chamber beams
Upon the seas, the waters, and the streams:
The clouds as chariots swift do scour the sky;
The stormy winds upon their wings do fly.
His angels spirits are, that wait his will,
As flames of fire his anger they fulfil.
In the beginning, with a mighty hand,
He made the earth by counterpoise to stand,
Never to move, but to be fixed still;
Yet hath no pillars but his sacred will.
This earth, as with a veil, once cover'd was,
The waters over-flowed all the mass:
But upon his rebuke away they fled,
And then the hills began to shew their head;
The vales their hollow bosoms open'd plain,
The streams ran trembling down the vales again:
And that the earth no more might drowned be,
He set the sea his bounds of liberty;
And though his waves resound, and beat the shore,
Yet it is bridled by his holy lore.
Then did the rivers seek their proper places,
And found their heads, their issues, and their races;

The springs do feed the rivers all the way,
And so the tribute to the sea repay:
Running along through many a pleasant field,
Much fruitfulness unto the earth they yield:
That know the beasts and cattle feeding by,
Which for to slake their thirst do thither hie.
Nay, desert grounds the streams do not forsake,
But through the unknown ways their journey take:
The asses wild, that hide in wilderness,
Do thither come, their thirst for to refresh.
The shady trees along their banks do spring,
In which the birds do build, and sit, and sing;
Stroking the gentle air with pleasant notes,
Plaining, or chirping through their warbling throats.
The higher grounds, where waters cannot rise,
By rain and dews are water'd from the skies;
Causing the earth put forth the grass for beasts,
And garden herbs, serv'd at the greatest feasts;
And bread, that is all viands firmament,
And gives a firm and solid nourishment;
And wine, man's spirits for to recreate;
And oil, his face for to exhilarate.
The sappy cedars, tall like stately tow'rs,
High-flying birds do harbour in their bow'rs:
The holy storks, that are the travellers,
Choose for to dwell and build within the firs;
The climbing goats hang on steep mountains side;
The digging conies in the rocks do bide.
The moon, so constant in inconstancy,
Doth rule the monthly seasons orderly;
The sun, eye of the world, doth know his race,
And when to shew, and when to hide his face.
Thou makest darkness, that it may be night,
When as the savage beasts, that fly the light,
As conscious of man's hatred, leave their den,
And range abroad, secur'd from sight of men.
Then do the forests ring of lions roaring,
That ask their meat of God, their strength restoring;
But when the day appears, they back do fly,
And in their dens again do lurking lie.

Then man goes forth to labour in the field,
Whereby his grounds more rich increase may yield.
O Lord, thy providence sufficeth all;
Thy goodness, not restrained, but general
Over thy creatures: the whole earth doth flow
With thy great largess pour'd forth here below.
Nor is it earth alone exalts thy name,
But seas and streams likewise do spread the same.
The rolling seas unto the lot doth fall
Of beasts innumerable, great and small;
There do the stately ships plow up the floods,
The greater navies look like walking woods;
The fishes there far voyages do make,
To divers shores their journey they do take.
There hast thou set the great Leviathan,
That makes the seas to seeth like boiling pan.
All these do ask of thee their meat to live,
Which in due season thou to them dost give.
Ope thou thy hand, and then they have good fare;
Shut thou thy hand, and then they troubled are.
All life and spirit from thy breath proceed,
Thy word doth all things generate and feed.
If thou withdraw'st it, then they cease to be,
And straight return to dust and vanity;
But when thy breath thou dost send forth again,
Then all things do renew and spring amain;
So that the earth, but lately desolate,
Doth now return unto the former state.
The glorious majesty of God above
Shall ever reign in mercy and in love:
God shall rejoice all his fair works to see,
For as they come from him all perfect be.
The earth shall quake, if aught his wrath provoke;
Let him but touch the mountains, they shall smoke.
As long as life doth last I hymns will sing,
With chearful voice, to the eternal King;
As long as I have being, I will praise
The works of God, and all his wondrous ways.
I know that he my words will not despise,
Thanksgiving is to him a sacrifice.

But as for sinners they shall be destroy'd
From off the earth, their places shall be void.
Let all his works praise him with one accord;
O praise the Lord, my soul; praise ye the Lord!

THE TRANSLATION OF THE CXXVIth PSALM.

When God return'd us graciously
Unto our native land,
We seem'd as in a dream to be,
And in a maze to stand.

The heathen likewise they could say:
The God, that these men serve,
Hath done great things for them this day,
Their nation to preserve.

'Tis true; God hath pour'd out his grace
On us abundantly,
For which we yield him psalms and praise,
And thanks with jubile.

O Lord, turn our captivity,
As winds, that blow at south,
Do pour the tides with violence
Back to the rivers mouth.

Who sows in tears shall reap in joy,
The Lord doth so ordain;
So that his seed be pure and good,
His harvest shall be gain.

THE TRANSLATION OF THE CXXXVIIth PSALM.

When as we sat, all sad and desolate,
By Babylon upon the river's side,
Eas'd from the tasks, which in our captive state
We were enforced daily to abide,
Our harps we had brought with us to the field,
Some solace to our heavy souls to yield.

But soon we found we fail'd of our account,
For when our minds some freedom did obtain,
Straightways the memory of Sion Mount
Did cause afresh our wounds to bleed again;
So that with present griefs, and future fears,
Our eyes burst forth into a stream of tears.

As for our harps, since sorrow struck them dumb,
We hang'd them on the willow-trees were near;
Yet did our cruel masters to us come,
Asking of us some Hebrew songs to hear:
Taunting us rather in our misery,
Than much delighting in our melody.

Alas, said we, who can once force or frame
His grieved and oppressed heart to sing
The praises of Jehovah's glorious name,
In banishment, under a foreign king?
In Sion is his seat and dwelling place,
Thence doth he shew the brightness of his face.

Jerusalem, where God his throne hath set,
Shall any hour absent thee from my mind?
Then let my right-hand quite her skill forget,
Then let my voice and words no passage find;
Nay, if I do not thee prefer in all,
That in the compass of my thoughts can fall.

Remember thou, O Lord, the cruel cry
Of Edom's children, which did ring and sound,
Inciting the Chaldean's cruelty,
"Down with it, down with it, even unto the ground."
In that good day repay it unto them,
When thou shalt visit thy Jerusalem.

And thou, O Babylon, shalt have thy turn
By just revenge, and happy shall he be,
That thy proud walls and tow'rs shall waste and burn,
And as thou didst by us, so do by thee.
Yea, happy he, that takes thy children's bones,
And dasheth them against the pavement stones.

THE TRANSLATION OF THE CXLIXth PSALM.

O SING a new song to our God above,
Avoid prophane ones, 'tis for holy quire:
Let Israel sing songs of holy love
To him that made them, with their hearts on fire:
Let Sion's sons lift up their voice and sing
Carols and anthems to their heav'nly King.

Let not your voice alone his praise forth tell,
But move withal, and praise him in the dance;
Cymbals and harps let them be tuned well,
'Tis he that doth the poor's estate advance:
Do this not only on the solemn days,
But on your secret beds your spirits raise.

O let the saints bear in their mouth his praise,
And a two-edged sword drawn in their hand,
Therewith for to revenge the former days
Upon all nations that their zeal withstand;
To bind their kings in chains of iron strong,
And manacle their nobles for their wrong.

Expect the time, for 'tis decreed in heav'n,
Such honour shall unto his saints be giv'n.

END OF VOL. II.

C. Baldwin, Printer,
New Bridge-street, London

UNIVERSITY OF CALIFORNIA LIBRARY
Los Angeles
This book is DUE on the last date stamped below.

REC'D LD-URL
JUN 1 8 1991
NOV 01 1993
REC'D LD-URL
APR 27 1994
AC MAY 01 1995

3 1158 00618 5911

MOVE

B 1153

CALL